

Colorado Department of Public Health and Environment

OPERATING PERMIT

SWG Colorado, LLC Valmont Combustion Turbine Facility

First Issued: November 1, 2003

Renewed: June 1, 2013

AIR POLLUTION CONTROL DIVISION COLORADO OPERATING PERMIT

FACILITY NAME: Valmont Combustion OPERATING PERMIT NUMBER

Turbine Facility

FACILITY ID: 013/1460

(formerly 013/0001) June 1, 2013

RENEWED: June 1, 2013 EXPIRATION DATE: June 1, 2018

MODIFICATIONS: See Appendix F of Permit

Issued in accordance with the provisions of Colorado Air Pollution Prevention and Control Act, 25-7-101 <u>et seq.</u> and applicable rules and regulations.

ISSUED TO: PLANT SITE LOCATION:

SWG Colorado, LLC Valmont Combustion Turbine Facility

PO Box 648 1800 North 63rd Street Englewood, CO 80151 Boulder, Colorado 80301

Boulder County

INFORMATION RELIED UPON

Operating Permit Renewal Application Received: October 5, 2007

And Additional Information Received: Various dates throughout permit drafting process

Nature of Business: Electricity Generation

Primary SIC: 4911

FACILITY CONTACT PERSON/ALTERNATIVE

01OPBO238

RESPONSIBLE OFFICIAL RESPONSIBLE OFFICIAL

Name: Greg Trewitt Name: Randy Fox

Title: Vice President of Operations & Title: Director of Environmental Services &

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SUBMITTAL DEADLINES -

First Semi-Annual Monitoring Period: June 1, 2013 – June 30, 2013

Subsequent Semi-Annual Monitoring Periods: July 1 – December 31, January 1 – June 30

First Semi-Annual Monitoring Report: Due Aug 1, 2013

Subsequent Semi-Annual Monitoring Reports: Due Feb 1, 2013 and August 1, 2014 and subsequent years

First Annual Compliance Period: June 1, 2013 – December 31, 2013

Subsequent Annual Compliance Periods: January 1 – December 31

Annual Compliance Certification: Due February 1, 2014 & subsequent years

Note that the Semi-Annual Monitoring Reports and Annual Compliance report must be received at the Division office by 5:00 p.m. on the due date. Postmarked dates will not be accepted for the purposes of determining the timely receipt of those reports.

FOR ACID RAIN SUBMITTAL DEADLINES SEE SECTION III.4 OF THIS PERMIT

TABLE OF CONTENTS:

SECT	ION I - General Activities and Summary	1
1.	Permitted Activities	
2.	Alternative Operating Scenarios (ver 1/23/2013)	2
3.	Non-Attainment New Source Review (NANSR) and Prevention of Significant Deterioration (PSD)	5
4.	Accidental Release Prevention Program (112(r))	
5.	Compliance Assurance Monitoring (CAM)	
6.	Summary of Emission Units	
SECT	ION II - Specific Permit Terms	
1.	Requirements Applicable Prior to October 1, 2012.	
2.	The following requirements apply beginning October 1, 2012	22
3.	Requirements Related to the Expiration of the Power Purchase Agreement Between Public Service Company and SWG Colorado, LLC (Colorado Construction Permit 09BO0958)	36
4.	Continuous Emission Monitoring Requirements	
SECTI	ION III - Acid Rain Requirements	12
1.	Designated Representative and Alternate Designated Representative	
2.	Sulfur Dioxide Emission Allowances and Nitrogen Oxide Emission Limitations.	
3.	Standard Requirements	
4.	Reporting Requirements	
5.	Comment, Notes and Justifications	
	ION IV - Permit Shield	
1.	Specific Non-Applicable Requirements	
2.	General Conditions	
3.	Streamlined Conditions	
SECT	ION V - General Permit Conditions (ver 5/22/2012)	
1.	Administrative Changes	
2.	Certification Requirements	
3.	Common Provisions	
4.	Compliance Requirements	
5.	Emergency Provisions	
6.	Emission Controls for Asbestos	
7.	Emissions Trading, Marketable Permits, Economic Incentives	
8.	Fee Payment	
9.	Fugitive Particulate Emissions	
10.	Inspection and Entry	
11.	Minor Permit Modifications	
12.	New Source Review	
13.	No Property Rights Conveyed	
14.	Odor	
15.	Off-Permit Changes to the Source	
16.	Opacity	
17.	Open Burning	
18.	Ozone Depleting Compounds	
19.	Permit Expiration and Renewal	56

TABLE OF CONTENTS:

20.	Portable Sources	56
21.	Prompt Deviation Reporting	56
22.	Record Keeping and Reporting Requirements	
23.	Reopenings for Cause	
24.	Section 502(b)(10) Changes	58
25.	Severability Clause	59
26.	Significant Permit Modifications	59
27.	Special Provisions Concerning the Acid Rain Program	59
28.	Transfer or Assignment of Ownership	59
29.	Volatile Organic Compounds	59
30.	Wood Stoves and Wood burning Appliances	
APPEN	NDIX A - Inspection Information	62
1.	Directions to Plant:	
2.	Safety Equipment Required:	62
3.	Facility Plot Plan:	62
4.	List of Insignificant Activities:	62
APPEN	NDIX B	64
Repo	orting Requirements and Definitions	64
-	toring and Permit Deviation Report - Part I	
	toring and Permit Deviation Report - Part II	
Moni	toring and Permit Deviation Report - Part III	72
APPEN	NDIX C	
Requ	ired Format for Annual Compliance Certification Reports	73
APPEN	NDIX D	
	ication Addresses	
APPEN	NDIX E	77
	it Acronyms	
	NDIX F	
	it Modifications	

SECTION I - General Activities and Summary

1. Permitted Activities

1.1 The Valmont Combustion Turbine Facility consists of two combustion turbine generators (CTGs) configured to operate in a simple-cycle mode (exhausts directly to the atmosphere). CT007 has a nominal heat input of 347 MMBtu/hr, and CT008 has a nominal heat input of 343 MMbtu/hr based on LHV. CT007 has a nominal electricity production of 38.153 MW at maximum capacity, and CT008 has a nominal electricity production of 40.746 MW at maximum capacity. Each turbine is equipped with a natural gas fired inlet air heater and water injection to control nitrogen oxide emissions.

Prior To October 1, 2012: The Valmont Combustion Turbine Facility operates for the purpose of generating power during intermediate and peak periods of electrical demand at the Valmont Power Plant (a coal-fired power plant at the same location, operated by Public Service Company). A separate Operating Permit has been issued for each operating company, however, the Valmont Combustion Turbine Facility and the Valmont Power Plant are considered to be a single stationary source for purposes of New Source Review (NSR) pre-construction permitting requirements and Title V Operating Permitting requirements.

Beginning October 1, 2012: The Power Purchase Agreement (PPA) between the operators of the Valmont Power Plant and SWG Colorado, LLC (SWG) will expire on September 30, 2012. When the PPA expires, the Valmont Combustion Turbine Facility will be classified as a separate source from the power plant.

The facility is located at 1800 North 63rd Street in Boulder. This facility is located in the Denver Metro Area. The Denver Metro Area is classified as attainment/maintenance for particulate matter less than 10 microns in diameter (PM_{10}) and carbon monoxide (CO). Under that classification, all SIP-approved requirements for PM_{10} and CO will continue to apply in order to prevent backsliding under the provisions of Section 110(1) of the Federal Clean Air Act. The Denver Metro Area is classified as non-attainment for ozone and is part of the 8-hr Ozone Control Area as defined in Regulation No. 7, Section II.A.1.

There are no affected states within 50 miles of the plant. Rocky Mountain National Park and Eagle's Nest National Wilderness Area are Federal Class I designated areas within 100 kilometers of the plant.

- 1.2 Until such time as this Operating Permit expires or is modified or revoked, the permittee is allowed to discharge air pollutants from this facility in accordance with the requirements, limitations, and conditions of this Operating Permit.
- 1.3 The Operating Permit incorporates the applicable requirements contained in the underlying construction permits, and does not affect those applicable requirements, except as modified during review of the application or as modified subsequent to permit issuance using the modification procedures found in Regulation No. 3, Part C. These Part C procedures meet all applicable substantive New Source Review requirements of Part B. Any revisions made using

Operating Permit 01OPBO238

the provisions of Regulation No. 3, Part C shall become new applicable requirements for purposes of this Operating Permit and shall survive reissuance. This Operating Permit incorporates the applicable requirements (except as noted in Section II) from the following construction permits: 09BO0958 (Modification No. 1 issued April 27, 2010)

- 1.4 All conditions in this Operating Permit are enforceable by US Environmental Protection Agency, Colorado Air Pollution Control Division (hereinafter Division) and its agents, and citizens unless otherwise specified. **State-only enforceable conditions are:** Permit Condition Number(s): Section V Conditions 3.g (last paragraph), 14 & 18 (as noted), Section II Conditions 1.12.1 & 2.12.1.
- 1.5 All information gathered pursuant to the requirements of this Operating Permit is subject to the Recordkeeping and Reporting requirements listed under Condition 22 of the General Conditions in Section V of this Operating Permit. Either electronic or hard copy records are acceptable.

2. Alternative Operating Scenarios (ver 1/23/2013)

2.1 Routine Turbine Component Replacements

The following physical or operational changes to the turbines in this permit are not considered a modification for purposes of NSPS GG, major stationary source NSR/PSD, or Regulation No. 3, Part B. Note that the component replacement provisions apply ONLY to those turbines subject to NSPS GG. Neither pre-GG turbines nor post GG turbines (i.e. KKKK turbines) can use those provisions. In the event that EPA promulgates amendments to Subparts GG and/or KKKK that further define or alter the definition of component replacements that will not trigger modifications, the provisions of those rules shall supersede the component replacement provisions listed below.

- 1) Replacement of stator blades, turbine nozzles, turbine buckets, fuel nozzles, combustion chambers, seals, and shaft packings, provided that they are of the same design as the original.
- 2) Changes in the type or grade of fuel used, if the original gas turbine installation, fuel nozzles, etc. were designed for its use.
- 3) An increase in the hours of operation (unless limited by a permit condition)
- 4) Variations in operating loads within the engine design specification.
- 5) Any physical change constituting routine maintenance, repair, or replacement.

Turbines undergoing any of the above changes are subject to all federally applicable and stateonly requirements set forth in this permit (including monitoring and record keeping), and shall be subject to any shield afforded by this permit. If replacement of any of the components listed in (1) or (5) above results in a change in serial number for the turbine, a letter explaining the action

Operating Permit 01OPBO238

as well as a revised APEN and appropriate filing fee shall be submitted to the Division within 30 days of the replacement.

Note that the repair or replacement of components must be of genuinely the same design. Except in accordance with the Alternate Operating Scenario set forth below, the Division does not consider that this allows for the entire replacement (or reconstruction) of an existing turbine with an identical new one or one similar in design or function. Rather, the Division considers the repair or replacements to encompass the repair or replacement of components at a turbine with the same (or functionally similar) components.

2.2 **Alternative Operating Scenarios**

The following Alternative Operating Scenario (AOS) for the temporary and permanent replacement of combustion turbines and turbine components has been reviewed in accordance with the requirements of Regulation No. 3., Part A, Section IV.A, Operational Flexibility-Alternative Operating Scenarios, Regulation No. 3, Part B, Construction Permits, and Regulation No. 3, Part D, Major Stationary Source New Source Review and Prevention of Significant Deterioration, and it has been found to meet all applicable substantive and procedural requirements. This permit incorporates and shall be considered a Construction Permit for any turbine or turbine component replacement performed in accordance with this AOS, and the permittee shall be allowed to perform such turbine or turbine component replacement without applying for a revision to this permit or obtaining a new Construction Permit.

2.2.1 General Requirements for Turbine Replacements

The following AOS is incorporated into this permit in order to deal with a turbine breakdown or periodic routine maintenance and repair of an existing onsite turbine that requires the use of a temporary or permanent replacement turbine. The definitions of "Temporary" and "Permanent" for each permitted unit are defined in Condition 2.2.6. The compliance demonstrations required by this AOS are in addition to any compliance demonstrations or periodic monitoring required by this permit.

All replacement turbines are subject to all federally applicable and state-only requirements set forth in this permit (including monitoring and record keeping), and shall be subject to any shield afforded by this permit.

Monitoring Requirements for Turbine Replacements 2.2.2

Subject to the provisions of C.R.S. 25-7-123.1 and in the absence of credible evidence to the contrary, data from the CEM shall be evidence of enforceable compliance or noncompliance of the replacement turbine with any short-term NOx and CO emissions limitations of the original turbine.

For comparison with an annual NO_x and CO emissions limit, data from the CEM shall be used to calculate the actual NO_x and CO emissions as set forth in this permit.

Operating Permit 01OPBO238 First Issued: November 1, 2003

Renewed: June 1, 2013

If the data from the CEM indicate compliance with both the NO_x and CO emission limitations, in the absence of credible evidence to the contrary, the source may certify that the turbine is in compliance with both the NO_x and CO emission limitations for the relevant time period.

If the CEM data fails to demonstrate compliance with any of the NO_x or CO emission limitations, and in the absence of credible evidence to the contrary, the turbine will be considered to be out of compliance for the relevant time periods(s). All data that indicates noncompliance shall be submitted to the Division within 14 calendar days after the data is collected.

2.2.3 Recordkeeping Requirements for Turbine Replacements

The permittee shall maintain a log on-site to contemporaneously record the start and stop date of any turbine replacement, the manufacturer and serial number of the turbine(s) that are replaced during the term of this permit, and the manufacturer and serial number of the replacement turbine.

2.2.4 Specific Requirements for Temporary Replacements

The permittee may temporarily replace an existing turbine covered by this permit as specified in Condition 2.2.6 with the exact make and model turbine without modifying this permit so long as the replacement turbine complies with the emission limitations and other requirements applicable to the original turbine as well as any new applicable requirements for the replacement turbine.

The permittee may temporarily replace a grandfathered or permit exempt turbine or a turbine that is not subject to emission limits without modifying this permit. In this circumstance, potential annual emissions of NO_x and CO from the temporary replacement turbine as projected by the CEM must be less than or equal to the potential annual emissions of NO_x and CO from the original grandfathered or permit exempt turbine or for the turbine that is not subject to emission limits, as determined by applying appropriate emission factors (e.g. AP-42 or manufacturer's emission factors)

2.2.5 Additional Sources

The replacement of an existing turbine with a new turbine is viewed by the Division as the installation of a new emissions unit, not "routine replacement" of an existing unit. The AOS is therefore essentially an advanced construction permit review. The AOS cannot be used for additional new emission points for any site; a turbine that is being installed as an entirely new emission point and not as part of an AOS-approved replacement of an existing onsite turbine has to go through the appropriate Construction/Operating permitting process prior to installation.

Operating Permit 01OPBO238

2.2.6 Allowable Replacements

Table 1 – Turbine Replacements Allowed by the AOS

Permitted Turbine		Allowable Replacements ¹	
Point Make/Model	Applicable NSPS Requirement	Status/Type	Restrictions
CT-007 GE LM6000	NSPS Subpart GG	All	Temporary replacement units may operate up to 270 days in any 12 month period ²
CT-008 GE LM6000		All	<u>Permanent</u> replacement units: not allowed (new permit or modification required)

Note 1: Replacement unit must be of the same make and model as the permitted unit

Note 2: The temporary replacement period is the total number of operating days that the replacement unit may operate in the same service. If the temporary replacement turbine operates only part of a day, that day counts toward the total. Temporary replacement units shall comply with all requirements in Conditions 2.2.1, 2.2.2 and 2.2.3, and with the specific requirements for temporary replacements in Condition 2.2.4.

3. Non-Attainment New Source Review (NANSR) and Prevention of Significant Deterioration (PSD)

3.1 Prior to October 1, 2012:

These turbines are located at a fossil fuel-fired steam electric plant of more than 250 million Btu per hour input and the facility is therefore categorized as a major stationary source (Potential to Emit > 100 Tons/Year).

This facility is categorized as a NANSR major stationary source (Potential to Emit of VOC or $NO_x \ge 100$ TPY). Future modifications at this facility resulting in a significant net emissions increase (see Reg 3, Part D, Sections II.A.26 and 42) for VOC or NO_x or a modification which is major by itself (Potential to Emit of ≥ 100 TPY of either VOC or NO_x) may result in the application of the NANSR review requirements.

This facility is categorized as a PSD major stationary source (Potential to Emit ≥ 100 TPY for PM, PM₁₀, SO₂, NO_x and CO). Future modifications at this facility resulting in a significant net emissions increase (see Reg 3, Part D, Sections II.A.26 and 42) or a modification which is major by itself (Potential to Emit of \geq 100 TPY) for any pollutant listed in Regulation No. 3, Part D, Section II.A.42 for which the area is in attainment or attainment/maintenance may result in the application of the PSD review requirements.

3.2 Beginning October 1, 2012

Based on the information provided by the applicant, this source is categorized as a minor stationary source for both NANSR and PSD as of October 1, 2012.

Operating Permit 01OPBO238 First Issued: November 1, 2003

Renewed: June 1, 2013

For NANSR, any future modification at this facility which is major by itself (i.e. a Potential to Emit of \geq 100 TPY of either VOC or NO_x) may result in the application of the NANSR review requirements.

For PSD, any future modification at this facility for which is major by itself (Potential to Emit of \geq 250 TPY) for any pollutant listed in Regulation No. 3, Part D, Section II.A.42 for which the area is in attainment or attainment/maintenance may result in the application of the PSD review requirements.

3.3 The following Operating Permits are associated with this facility for purposes of determining applicability of Prevention of Significant Deterioration regulations prior to October 1, 2012: 96OPBO131 (issued to Public Service Company of Colorado).

4. Accidental Release Prevention Program (112(r))

4.1 Based on information provided by the permittee, this facility is not subject to the provisions of the Accidental Release Prevention Program (section 112(r)) of the Federal Clean Air Act.

5. Compliance Assurance Monitoring (CAM)

5.1 The following emission points listed in Condition 6.1 of this operating permit use a control device to achieve compliance with an emission limitation or standard to which they are subject and have pre-control emissions that exceed or are equivalent to the major source threshold. They are therefore subject to the provisions of the CAM program as set forth in 40 CFR Part 64, as adopted by reference in Colorado Regulation No. 3, Part C, Section XIV: None.

The turbines and air inlet heaters are not subject to CAM since at the time the CAM plan was required the Title V permit specified a continuous compliance determination method (40 CFR Part 64 §64.2(b)(1)(vi), as adopted by reference in Colorado Regulation No. 3, Part C, Section XIV).

Operating Permit 01OPBO238 First Issued: November 1, 2003

Renewed: June 1, 2013

6. Summary of Emission Units

6.1 The emissions units¹ regulated by this Operating Permit are the following:

Facility ID	AIRS ID	Description	Pollution Control	Startup Date
CT007	002	One (1) General Electric (GE) Model LM6000, Natural Gas Fired Combustion Turbine Generator, rated at 347 MMBtu/hr, Serial Number: 191-232.	Water injection to control NO _x emissions	First Fire: May 7, 2000 Commercial Operation: May 26, 2000
CT008	0003	One (1) General Electric (GE) Model LM6000, Natural Gas Fired Combustion Turbine Generator, rated at 343 MMBtu/hr, Serial Number: 191-230.	Water injection to control NO _x emissions	First Fire: May 29, 2001 Commercial Operation: July 7, 2001
AP008	001	One (1) natural gas fired inlet air heater, rated at 6.5 MMBtu/hr	N/A	
AP007	004	One (1) natural gas fired inlet air heater, rated at 5 MMBtu/hr	N/A	

Notes

^{1.} The combustion turbine units listed in this table are referenced in the Acid Rain and Greenhouse Gas reports as CT7 and CT8.

SECTION II - Specific Permit Terms

1. Requirements Applicable Prior to October 1, 2012.

CT007: One natural gas-fired combustion turbine, rated at 347 MMBtu/hr

CT008: One natural gas-fired combustion turbine, rated at 343 MMBtu/hr

AP007: One natural gas fired inlet air heater, rated at 5 MMBtu/hr

AP008: One natural gas fired inlet air heater, rated at 6.5 MMBtu/hr

Unless otherwise specified, the limitations identified are for both turbines and both inlet air heaters combined.

	Permit Condition	Limitation	Compliance Emission Factor	Monit	oring
Parameter	Number		Emission Factor	Method	Interval
NO _x	1.1	RACT 42 ppmvd @ 15% O ₂ on a 1-hr rolling average except as provided for below. During Combustion Tuning and Testing (not to exceed 100 hours per year for both turbines combined): 117.8 ppmvd for each turbine @ 15% O ₂ on a 1-hr average 39.0 tons/year	N/A	Continuous Emission Monitoring System	Continuously
СО	1.2	RACT 100 ppmvd @ 15% O ₂ on a 1-hr rolling average 90.8 tons/yr	N/A	Continuous Emission Monitoring System	Continuously
SO_2	1.3	For Each Turbine: 150 ppmvd @ 15% O ₂ OR Use of a fuel which contains less than 0.8 Weight% Sulfur For Each Turbine: 0.35 lb/MMBtu, on a 3-Hour rolling average	N/A	Fuel Restriction	Only Pipeline Quality Natural Gas is Used as Fuel
		0.6 tons/yr	See Condition 1.3.3	40 CFR Part 75, Appendix D	As specified in 40 CFR Part 75, Appendix D

Operating Permit 01OPBO238

	Permit	Limitation	Compliance Emission Factor	Monit	oring
Parameter	Condition Number		Emission Factor	Method	Interval
VOC	1.4	RACT Good combustion practices Pipeline Quality Natural Gas	N/A	See Condi	tion 1.4.1
		3.5 tons/yr	See Condition 1.4.2	Recordkeeping and Calculation	Monthly
		For Each Combustion Turbine 0.1 lb/MMBtu, the average of three 1-hr tests			Only Pipeline
PM	1.5	For Each Inlet Air Heater 0.3 lb/MMBtu, the average of three 1-hr tests	N/A	Fuel Restriction	Quality Natural Gas is Used as Fuel
		RACT Pipeline Quality Natural Gas			
		9.0 tons/yr	See Condition 1.5.4	Recordkeeping and Calculation	Monthly
PM ₁₀	1.5.4	9.0 tons/yr	See Condition 1.5.4	Recordkeeping and Calculation	Monthly
Natural Gas Consumption	1.6	2027.3 MMScf/yr	N/A	Fuel meter	Monthly
Continuous Emission Monitoring System Requirements	1.7	N/A	N/A	See Cond	ition 1.7
Fuel Flow Meter	1.8	N/A	N/A	See Cond	ition 1.8
Sulfur Content of Natural Gas	1.9	Pipeline Quality Natural Gas (total sulfur content not to exceed 0.5 grains/100 SCF)	N/A	See Cond	ition 1.9
Btu Content of Natural Gas	1.10	N/A	N/A	ASTM Methods	Monthly
NSPS General Provisions	1.11	N/A	N/A	As required by NSPS General Provisions	Subject to NSPS General Provisions

	Permit Condition	Limitation	Compliance Emission Factor	Monit	oring
Parameter	Number		Emission Factor	Method	Interval
Opacity	1.12	State Only Requirement: Not to Exceed 20% Not to exceed 20%, Except as Provided for Below For Certain Operational Activities Not to Exceed 30%, for a Period or Periods Aggregating More than Six (6) Minutes in any 60 Consecutive Minutes	N/A	Fuel Restriction	Only Natural Gas is Used as Fuel
Emission Calculation Methods	1.13	N/A		See Condition 1.13	
Insignificant Activity Emissions	1.14	See Condition 1.14		Recordkeeping and Calculation	Annually
Acid Rain Requirements	1.15	See Section III of this P	ermit	Certification	Annually

- 1.1 Emissions of Nitrogen Oxides (NO_x) shall not exceed the following limitations:
 - 1.1.1 This source is located in a non-attainment area for ozone. The Reasonably Available Control Technology (RACT) requirements of Regulation Number 3, Part B, Section III.D.2.a. The following requirements were determined to be RACT for this source:
 - 1.1.1.1 A water injection system capable of limiting the concentration of NO_x in the exhaust as specified below (Colorado Construction Permit 09BO0958).
 - 1.1.1.2 Except as provided for below, emissions of NO_x shall not exceed 42 ppmvd at 15% O₂, on a 1-hour average. This standard applies to **each turbine** (Colorado Construction Permit 09BO0958)
 - 1.1.1.3 During periods of startup and shutdown, or combustion tuning and testing the limits of Condition 1.1.1.2 do not apply.
 - 1.1.1.4 During periods of combustion tuning and testing, emissions of NO_x shall not exceed 117.8 ppmvd at 15% O_2 on a 1-hour average. This limit is applicable to **each turbine.** (Colorado Construction Permit 09BO0958)

Use of this NO_x emission limit for purposes of combustion tuning and/or testing shall not exceed 100 hours in any calendar year **for both turbines combined**. Records of the number of hours each turbine undergoes combustion tuning and/or testing shall be recorded and maintained and made available to the Division upon request.

1.1.1.5 Definition of Startup and Shutdown (Colorado Construction Permit

Operating Permit 01OPBO238

First Issued: November 1, 2003

Renewed: June 1, 2013

09BO0958 as modified under the provisions of Section I Condition 1.3):

- a. "Startup" means the setting in operation of any air pollution source for any purpose. Setting in operation for these turbines begins when fuel is injected into the turbine. Setting in operation for these turbines ends 20 minutes after the turbine reaches and maintains a minimum load of 15 MW for 15 minutes, or 60 minutes after setting in operation, whichever occurs first.
- b. "Shutdown" means the cessation of operation of any air pollution source for any purpose. The cessation of operation for these turbines begins when the command signal is initiated by the turbine operator to shutdown the unit and ends when fuel is no longer being fired in the turbine.
- 1.1.1.6 "Combustion Tuning and Testing" means the operation of the unit for combustion tuning and testing operations after a unit overhaul (a turbine replacement as allowed under the Alternative Operating Scenario (see Condition 2.2 in Section I of this Operating Permit)) or as part of routine maintenance operations. Combustion tuning and testing can occur from initial fuel firing to maximum load conditions (Colorado Construction Permit 09BO0958).

Compliance with the NO_x RACT emission limitations shall be monitored using the continuous emission monitoring system (CEMS) required by condition 1.7, as follows (Colorado Construction Permit 09BO0958 as modified under the provisions of Section I Condition 1.3):

- 1.1.1.7 For the purposes of this Condition 1.1.1.7 1.1.1.10, "valid CEMS data points" shall mean CEMS monitoring data that is collected while the unit is combusting fuel but not during periods of calibration, quality assurance, or preventive maintenance, performed pursuant to §75.21 and Appendix B of Part 75, periods of repair, periods of backups of data from the data acquisition and handling system, or recertification performed pursuant to 40 CFR §75.20.
- 1.1.1.8 Average NO_x concentration (ppm) values shall be calculated as specified in Conditions 1.1.1.9 1.1.1.10 for each clock hour that includes the minimum number of valid CEMS data points as follows:
 - a. At least one valid CEMS data point shall be collected from each quadrant of the clock hour in which the unit operated.
 - b. Notwithstanding the above, at least two valid CEMS data points shall be collected, separated by a minimum of 15 minutes, for each clock hour during which any of the QA/QC activities specified in Condition 1.1.1.7 occurred, where the unit operated for more than one quadrant of an hour.

Operating Permit 01OPBO238

Data used to generate average values as specified in Conditions 1.1.1.9 - 1.1.1.10 shall not include replaced data, nor shall the data be bias-adjusted. Replaced data shall be reported as monitor down time in the semi-annual reports required by Condition 4.4.

- 1.1.1.9 At the end of each clock hour, all valid CEMS data points that are NO_x concentration (ppm) values collected during periods of combustion tuning or testing shall be reduced to an average value for that hour. This value shall be compared to the limitation in Condition 1.1.1.4.
- 1.1.1.10 At the end of each clock hour, all valid CEMS data points that are NO_x concentration (ppm) values collected during periods that do not qualify as startup, shutdown or combustion tuning and testing shall be reduced to an average value for that hour. This value shall be compared to the limitation in Condition 1.1.1.2.
- 1.1.2 Total emissions of NO_x from the two (2) natural gas-fired combustion turbine generators and two natural gas-fired inlet air heaters combined shall not exceed 39.0 tons per year (Colorado Construction Permit 09BO0958). Monthly emissions shall be calculated as follows:

Turbines:

For any hour in which fuel is combusted in the turbines, the permittee shall program the DAHS to calculate lb/hr NO_x emissions in accordance with the requirements in Section II Condition 4.1.1.3b of this Operating Permit and 40 CFR Part 75, including any replaced data and the data shall be bias-adjusted, if warranted.

Specifically hourly mass NO_x emissions (in lb/hr) shall be calculated by multiplying the hourly NO_x lb/MMBtu value (which includes replaced or bias-adjusted data, as applicable) by the hourly heat input value (MMBtu/hr). The hourly NO_x lb/MMBtu and heat input values shall be determined using equations F-5 and F-20 in Appendix F of 40 CFR Part 75. The resulting NO_x lb/hr value is then multiplied by the unit operating time for that hour to produce a NO_x lbs value. Hourly NO_x mass emissions (lbs) shall be summed and divided by 2000 lb/ton to determine monthly NO_x emissions (in tons).

Inlet Air Heaters:

Monthly emissions for the inlet air heaters shall be calculated by the end of the subsequent month using the procedure specified in Condition 1.13.1.

Monthly emissions (in tons) from the two (2) natural gas-fired combustion turbine generators and two natural gas-fired inlet air heaters combined shall be summed together and used in a twelve month rolling total to monitor compliance with the annual emission limitation. Each month a new twelve month total shall be calculated using the previous twelve months total.

Operating Permit 01OPBO238

- 1.2 Emissions of Carbon Monoxide (CO) shall not exceed the following limitations:
 - 1.2.1 This source is located in an attainment/maintenance area for Carbon Monoxide. The Reasonably Available Control Technology (RACT) requirements of Regulation Number 3, Part B, Section III.D.2.a apply. The following requirements were determined to be RACT for this source:
 - 1.2.1.1 Good Combustion Practices shall be used to limit the concentration of CO in the exhaust as specified below. (Colorado Construction Permit 09BO0958, as modified under the provisions of Section I Condition 1.3)
 - 1.2.1.2 Except as provided for below, emissions of CO shall not exceed 100 ppmvd at 15% O₂, on a 1-hour average. This standard applies to **each turbine**.
 - 1.2.1.3 During periods of startup and shutdown, the limits of Condition 1.2.1.2 do not apply.
 - 1.2.1.4 Definition of Startup and Shutdown:
 - a. "Startup" shall have the same definitions as in Condition 1.1.1.5a
 - b. "Shutdown" shall have the same definitions as in Condition 1.1.1.5b

Compliance with the CO RACT emission limitations shall be monitored using the CEMS required by Condition 1.7, as follows:

- 1.2.1.5 For the purposes of this Condition 1.2.1.5 1.2.1.7, "valid CEMS data points" shall mean CEMS monitoring data that is collected while the unit is combusting fuel but not during periods of calibration, quality assurance, or preventive maintenance, performed pursuant to §75.21 and Appendix B of Part 75, periods of repair, periods of backups of data from the data acquisition and handling system, or recertification performed pursuant to 40 CFR §75.20.
- 1.2.1.6 Average CO concentration (ppm) values shall be calculated as specified in Condition 1.2.1.7 for each clock hour that includes the minimum number of valid CEMS data points as follows:
 - a. At least one valid CEMS data point shall be collected from each quadrant of the clock hour in which the unit operated.
 - b. Notwithstanding the above, at least two valid CEMS data points shall be collected, separated by a minimum of 15 minutes, for each clock hour during which any of the QA/QC activities specified in Condition 1.2.1.5 occurred, where the unit operated for more than one quadrant of an hour.

Data used to generate average values as specified in Condition 1.2.1.7 shall not include replaced data, nor shall the data be bias-adjusted.

Operating Permit 01OPBO238 First Issued: November 1, 2003

Replaced data shall be reported as monitor down time in the semi-annual reports required by Condition 4.4.

- 1.2.1.7 At the end of each clock hour, all valid CEMS data points that are CO concentration (ppm) values collected during periods that do not qualify as startup or shutdown shall be reduced to an average value for that hour. This value shall be compared to the limitation in Condition 1.2.1.2.
- 1.2.2 Total emissions of CO from the two (2) natural gas-fired combustion turbine generators and two (2) natural gas-fired inlet air heaters combined shall not exceed 90.8 tons per year (Colorado Construction Permit 09BO0958). Monthly emissions shall be calculated as follows:

Turbines:

For any hour in which fuel is combusted in the turbines, the permittee shall program the DAHS to calculate lb/hr CO emissions in accordance with the requirements in Section II Condition 4.1.1.3b of this Operating Permit and 40 CFR Part 75, including any replaced data if warranted.

Specifically hourly mass CO emissions (in lb/hr) shall be calculated by multiplying the hourly CO lb/MMBtu value (which includes replaced data in accordance with the provisions in Part 75 for NO_x replacement, as applicable) by the hourly heat input value (MMBtu/hr). The hourly CO lb/MMBtu and heat input values shall be determined using equations F-5 (except that the value of K is 7.27 x 10^s for carbon monoxide) and F-20 in Appendix F of 40 CFR Part 75. The resulting CO lb/hr value is then multiplied by the unit operating time for that hour to produce a CO lbs value. Hourly CO mass emissions (lbs) shall be summed and divided by 2000 lb/ton to determine monthly CO emissions (in tons).

See Condition 4 for further details on applying 40 CFR Part 75 methods to the CO CEMS.

(Colorado Construction Permit 09BO0958 as modified under the provisions of Section I Condition 1.3)

Inlet Air Heaters:

Monthly emissions for the inlet air heaters shall be calculated by the end of the subsequent month using the procedure specified in Condition 1.13.1.

Monthly emissions (in tons) from the two (2) natural gas-fired combustion turbine generators and two (2) natural gas-fired inlet air heaters combined shall be summed together and used in a twelve month rolling total to monitor compliance with the annual emission limitation. Each month a new twelve month total shall be calculated using the previous twelve months total.

Operating Permit 01OPBO238

- 1.3 Sulfur Dioxide (SO₂) emissions shall not exceed the following limitations:
 - 1.3.1 These turbines are subject to 40 CFR Part 60 Subpart GG Standards of Performance for Stationary Gas Turbines, as adopted by reference in Colorado Regulation No. 6, Part A. The following limits and requirements apply to **each turbine**:
 - 1.3.1.1 No owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any stationary gas turbine any gases which contain sulfur dioxide in excess of 150 ppmvd at 15 percent oxygen and on a dry basis (§60.333(a)) **OR**
 - 1.3.1.2 No owner or operator subject to the provisions of this subpart shall burn in any stationary gas turbine any fuel which contains total sulfur in excess of 0.8 percent by weight (8000 ppmw) (§60.333(b)).

Compliance with the above requirements is presumed, in the absence of credible evidence to the contrary, since only pipeline quality natural gas that meets the requirements in Condition 1.9 is permitted to be used as fuel in these turbines (Colorado Construction Permit 09BO0958 as modified under the provisions of Section I Condition 1.3).

- 1.3.2 Sulfur Dioxide (SO₂) emissions **from each turbine** shall not exceed 0.35 lb/MMBtu, on a 3-hour rolling average (Colorado Regulation No 1, Section VI.B.4.c.(ii) and VI.B.2). Compliance this requirement is presumed, in the absence of credible evidence to the contrary, since only pipeline quality natural gas that meets the requirements in Condition 1.9 is permitted to be used as fuel in these turbines.
- 1.3.3 Total emissions of SO₂ from the two (2) natural gas-fired combustion turbine generators and two (2) natural gas-fired inlet air heaters combined shall not exceed 0.6 tons per year (Colorado Construction Permit 09BO0958). Monthly emissions shall be calculated as follows:

Turbines:

Monthly emissions shall be monitored using the monitoring method specified in 40 CFR Part 75, Appendix D.

Inlet Air Heaters:

Monthly emissions for the inlet air heaters shall be calculated by the end of the subsequent month using the procedure specified in Condition 1.13.1.

Monthly emissions (in tons) from the two (2) natural gas-fired combustion turbine generators and two (2) natural gas-fired inlet air heaters combined shall be summed together and used in a twelve month rolling total to monitor compliance with the annual emission limitation. Each month a new twelve month total shall be calculated using the previous twelve months total.

Operating Permit 01OPBO238

- 1.4 Volatile Organic Carbon (VOC) emissions are subject to the following requirements:
 - 1.4.1 This source is located in a non-attainment area for ozone. The Reasonably Available Control Technology (RACT) requirements of Regulation Number 3, Part B, Section III.D.2.a apply. The following requirements were determined to be RACT for this source:
 - 1.4.1.1 Good combustion practices and the use of pipeline quality natural gas shall be used to minimize emissions of VOC (Colorado Construction Permit 09BO0958):

Compliance with the above requirements is presumed, in the absence of credible evidence to the contrary, whenever:

The CO RACT requirements of Condition 1.2.1 are met AND

The pipeline quality natural gas requirements in Condition 1.9 are met.

1.4.2 Total emissions of VOC from the two (2) natural gas-fired combustion turbine generators and two (2) natural gas-fired inlet air heaters combined shall not exceed 3.5 tons per year (Colorado Construction Permit 09BO0958). Monthly emissions shall be calculated as follows:

Turbines:

Monthly emissions for the turbines shall be calculated by the end of the subsequent month using the procedure specified in Condition 1.13.2.

Inlet Air Heaters:

Monthly emissions for the inlet air heaters shall be calculated by the end of the subsequent month using the procedure specified in Condition 1.13.1

Monthly emissions (in tons) from the two (2) natural gas-fired combustion turbine generators and two (2) natural gas-fired inlet air heaters combined shall be summed together and used in a twelve month rolling total to monitor compliance with the annual emission limitation. Each month a new twelve month total shall be calculated using the previous twelve months total.

- 1.5 Particulate Matter (PM) emissions shall not exceed the following limitations:
 - 1.5.1 Particulate Matter (PM) emissions **from each combustion turbine** shall not exceed 0.1 lb/MMBtu, based on the average of three (3) 1-hr tests (Colorado Regulation No. 1, Section III.A.1.b). In the absence of credible evidence to the contrary, compliance with the particulate matter limitation is presumed since only pipeline quality natural gas is permitted to be used as fuel in the turbines.

Operating Permit 01OPBO238

Note that the numeric PM standards for the turbines were determined using the design heat input for each turbine (347 MMBtu/hr for CT007 and 343 MMBtu for CT008) in the following equation:

 $PE = 0.5 \text{ x (FI)}^{-0.26}$

Where PE = particulate standard in lb/MMBtu

FI = Fuel Input in MMBtu/hr

1.5.2 Particulate Matter (PM) emissions **from each inlet air heater** shall not exceed 0.3 lb/MMBtu, based on the average of three (3) 1-hr tests (Colorado Regulation No. 1, Section III.A.1.b). In the absence of credible evidence to the contrary, compliance with the particulate matter limitation is presumed since only pipeline quality natural gas is permitted to be used as fuel in the inlet air heaters.

Note that the numeric PM standards for the inlet heaters were determined using the design heat input for each inlet air heater (5 MMBtu/hr for AP007 and 6.5 MMBtu for AP008) in the following equation:

 $PE = 0.5 \text{ x (FI)}^{-0.26}$

Where PE = particulate standard in lb/MMBtu

FI = Fuel Input in MMBtu/hr

1.5.3 This source is located in an attainment-maintenance area for PM₁₀ and is subject to the Reasonably Available Control Technology (RACT) requirements of Regulation Number 3, Part B, Section III.D.2.a. The following requirements were determined to be RACT for this source (Colorado Construction Permit 09BO0958):

Only pipeline-quality natural gas shall be used as fuel in the turbines and inlet air heaters.

Compliance with the above requirement is presumed, in the absence of credible evidence to the contrary, since only pipeline quality natural gas that meets the requirements in Condition 1.9 is permitted to be used as fuel in these turbines and inlet air heaters.

1.5.4 Total emissions of PM, and PM_{10} from the two (2) natural gas-fired combustion turbine generators and two (2) natural gas-fired inlet air heaters combined shall not exceed 9.0 tons per year of each pollutant (Colorado Construction Permit 09BO0958). PM and PM_{10} limits include condensables. Monthly emissions shall be calculated as follows:

Turbines:

Monthly emissions for the turbines shall be calculated by the end of the subsequent month using the procedure specified in Condition 1.13.2.

Inlet Air Heaters:

Monthly emissions for the inlet air heaters shall be calculated by the end of the subsequent month using the procedure specified in Condition 1.13.1.

Monthly emissions (in tons) from the two (2) natural gas-fired combustion turbine generators and two (2) natural gas-fired inlet air heaters combined shall be summed together and used in a twelve month rolling total to monitor compliance with the annual emission limitation. Each month a new twelve month total shall be calculated using the previous twelve months total.

- 1.6 Total natural gas consumption for the two (2) natural gas-fired combustion turbine generators and two (2) natural gas-fired inlet air heaters combined shall not exceed 2027.3 MMscf/yr (Colorado Construction Permit 09BO0958). The natural gas consumption for the two natural gas-fired combustion turbine generators and the two natural gas-fired inlet air heaters shall be monitored and recorded monthly in accordance with the requirements of Condition 1.8. Monthly natural gas consumption for the turbines and inlet air heaters shall be summed together and used in a rolling twelve month total to monitor compliance with the annual limitation. Each month a new twelve month rolling total shall be calculated using the previous twelve months data.
- 1.7 **Each** turbine exhaust stack shall be equipped with a continuous emission monitoring system to measure and record the following (Colorado Construction Permit 09BO09558 as modified under the provisions of Section I Condition 1.3):
 - 1.7.1 Concentration of Oxides of Nitrogen; ppmvd corrected to 15% O₂, hourly average;
 - 1.7.2 Emissions of Oxides of Nitrogen; lb/hr, tons per month;
 - 1.7.3 Concentration of Carbon Monoxide; ppmvd corrected to 15% O₂, hourly average;
 - 1.7.4 Emissions of Carbon Monoxide; lb/hr, tons per month;
 - 1.7.5 Concentration of Oxygen, percent hourly average;
 - 1.7.6 Operating mode startup, shutdown and/or standard operation;
 - 1.7.7 Load, MW in which the turbine is operating

The continuous emission monitoring systems shall meet the requirements in Condition 4 of this Operating Permit. Monthly emissions of NO_x and CO from the continuous emission monitoring system shall be used as specified by Conditions 1.1.2 and 1.2.2 to monitor compliance with the annual NO_x and CO emission limits.

- 1.8 **Each turbine** shall be equipped with an in-line fuel flow meter that meets the requirements in 40 CFR Part 75 Appendix D to measure fuel combusted in each turbine. Fuel flow data shall be recorded on a data acquisition and handling system as specified in 40 CFR Part 75 Appendix D.
 - **Inlet air heaters:** Natural gas consumption from the inlet air heaters shall be monitored and recorded monthly.
 - The sum of fuel combusted in the turbines plus the inlet heaters shall be used to monitor compliance with the total natural gas consumption limit as specified in Condition 1.6.
- 1.9 The owner or operator shall maintain records demonstrating that the natural gas burned meets the definition of pipeline quality natural gas as defined in 40 CFR Part 72. Specifically, the owner or operator shall demonstrate that the natural gas burned has a total sulfur content less than 0.5 grains/100 SCF. The demonstration shall be made using any of the methods identified in 40 CFR Part 75, Appendix D, Section 2.3.1.4. These records shall be made available to the Division upon request. (Colorado Construction Permit 09BO0958 as modified under the provisions of Section I Condition 1.3)
 - Note that this Condition 1.9 shall also be used to monitor compliance with the fuel sulfur requirements of Condition 1.3.1.2.
- 1.10 The Btu content of the natural gas used to fuel this equipment shall be determined using the procedures set forth in 40 CFR Part 75. Calculation of monthly emissions outlined under Condition 1.13 shall be based on the most recent Btu determination. The Btu content shall be based on the average of the saturated and dry gross heating values (HHV) of the fuel. (Colorado Construction Permit 09BO0958 as modified under the provisions of Section I Condition 1.3)
- 1.11 Regulation No. 6, Part A, Subpart A, General Provisions apply as follows:
 - 1.11.1 No article, machine, equipment or process shall be used to conceal an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere. (40 CFR Part 60 Subpart A §60.12, as adopted by reference in Colorado Regulation No. 6, Part A)
 - 1.11.2 At all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. (40 CFR Subpart A §60.11(d), as adopted by reference in Colorado Regulation No. 6, Part A)

Operating Permit 01OPBO238

- 1.12 The turbines and inlet air heaters are subject to the following opacity requirements:
 - 1.12.1 **State-Only Requirement:** No owner or operator may discharge, or cause the discharge into the atmosphere of any particulate matter which is greater than 20% opacity (Colorado Regulation No. 6, Part B, Section II.C.3). This opacity standard applies to **each turbine and each inlet air heater.**

This opacity standard applies at all times except during periods of startup, shutdown and malfunction (40 CFR Part 60 Subpart A §60.11(c), as adopted by reference in Colorado Regulation No. 6, Part B, Section I.A).

Note that this opacity requirement is more stringent than the opacity requirement in Condition 1.12.3 during periods of building of a new fire, cleaning of fire boxes, soot blowing, process modifications and adjustment or occasional cleaning of control equipment.

- 1.12.2 Except as provided for in Condition 1.12.3 below, no owner or operator of a source shall allow or cause the emission into the atmosphere of any air pollutant which is in excess of 20% opacity (Colorado Regulation No. 1, Section II.A.1). This opacity standard applies to **each turbine and each inlet air heater.**
- 1.12.3 No owner or operator of a source shall allow or cause to be emitted into the atmosphere any air pollutant resulting from the building of a new fire, cleaning of fire boxes, soot blowing, start-up, process modifications, or adjustment or occasional cleaning of control equipment which is in excess of 30% opacity for a period or periods aggregating more than six (6) minutes in any sixty (60) consecutive minutes (Colorado Regulation No. 1, Section II.A.4). This opacity standard applies to each turbine and each inlet air heater.

In the absence of credible evidence to the contrary, each turbine and inlet air heater shall be presumed to be in compliance with the above opacity requirements whenever pipeline quality natural gas is used as a fuel.

1.13 Emission calculation methods

1.13.1 Monthly emissions from the inlet air heaters shall be calculated using the monthly natural gas consumption for the heaters (as determined by Condition 1.8), the heat content of the natural gas (as determined by Condition 1.10) and the emission factors identified in the table below in the following equation:

Pollutant	Emission Factor (lb/MMBtu)	Source of Emission
	Inlet Air Heaters	Factor
NOx	0.0362	
СО	0.0368	Manufacturer
SO_2	0.0006	- Manufacturer
VOC	0.0058	

Operating Permit 01OPBO238

PM	0.0060	
PM_{10}	0.0060	

 $\frac{Tons}{Month} = \frac{Emission Factor (lbs/MMBtu) \times Gas Use (MMScf/Month) \times Heat Content of Gas (MMBtu/MMScf)}{2000 (lbs/ton)}$

1.13.2 Monthly emissions of VOC, PM, and PM_{10} from the turbines shall be calculated using the emission factors identified in the table below in the following equation:

	Emission Factor (lb/MMBtu)	
Pollutant	Turbines	Source of Emission Factor
VOC	CT7: 0.0029	
	CT8: 0.0039	Manufaatuman
PM	0.0091	Manufacturer
PM_{10}	0.0091	

 $\frac{\text{Tons}}{\text{Month}} = \frac{\text{Emission Factor (lbs/MMBtu)} \times \text{Heat Input (MMBtu/Month)}}{2000 \text{ (lbs/ton)}}$

The monthly heat input to the turbines shall be determined using the data acquisition and handling system (DAHS) for the CEMS required by Condition 1.7.

- 1.14 NO_x, and CO emissions from all insignificant activities associated with the Valmont Combustion Turbine Facility shall be included in determining compliance with the emission limits set forth in Conditions 1.1.2 and 1.2.2. The applicant shall track emissions from all NO_x, and CO emitting insignificant activities on a yearly basis. This information shall be kept on site and made available to the Division upon request. (Colorado Construction Permit 09BO0958, as modified under the provisions of Section I Condition 1.3)
- 1.15 These units are subject to the Title IV Acid Rain Requirements. As specified in 40 CFR Part 72.72(b)(1)(viii), the acid rain permit requirements shall be a complete and segregable portion of the Operating Permit. As such, the requirements are found in Section III of this permit.

2. The following requirements apply beginning October 1, 2012

CT007: One natural gas-fired combustion turbine, rated at 347 MMBtu/hr

CT008: One natural gas-fired combustion turbine, rated at 343 MMBtu/hr

AP007: One natural gas fired inlet air heater, rated at 5 MMBtu/hr

AP008: One natural gas fired inlet air heater, rated at 6.5 MMBtu/hr

Unless otherwise specified, the limitations identified are for both turbines and both inlet air heaters combined.

Parameter	Permit Condition Number	Limitation	Compliance Emission Factor	Monitoring	
				Method	Interval
NO _x	2.1	RACT 42 ppmvd @ 15% O ₂ on a 1-hr rolling average except as provided for below. During Combustion Tuning and Testing (not to exceed 100 hours per year for both turbines combined): 117.8 ppmvd for each turbine @ 15% O ₂ on a 1-hr average	N/A	Continuous Emission Monitoring System	Continuously
СО	2.2	RACT 100 ppmvd @ 15% O ₂ on a 1-hr rolling average 181.6 tons/yr	N/A	Continuous Emission Monitoring System	Continuously
SO_2	2.3	For Each Turbine: 150 ppmvd @ 15% O ₂ OR Use of a fuel which contains less than 0.8 Weight% Sulfur For Each Turbine: 0.35 lb/MMBtu, on a 3-Hour rolling average	N/A	Fuel Restriction	Only Pipeline Quality Natural Gas is Used as Fuel
		0.5 tons/yr	See Condition 2.3.3	40 CFR Part 75, Appendix D	As specified in 40 CFR Part 75, Appendix D
VOC	2.4	RACT Good combustion practices Pipeline Quality Natural Gas	N/A	See Condition 2.4.1	
		5.0 tons/yr	See Condition 2.4.2	Recordkeeping and Calculation	Monthly

	Permit Condition Number	Limitation	Compliance Emission Factor	Monitoring	
Parameter				Method	Interval
РМ	2.5	For Each Combustion Turbine 0.1 lb/MMBtu, the average of three 1-hr tests For Each Inlet Air Heater 0.3 lb/MMBtu, the average of three 1-hr tests	N/A	Fuel Restriction	Only Pipeline Quality Natural Gas is Used as Fuel
		RACT Pipeline Quality Natural Gas			
		7.8 tons/yr	See Condition 2.5.4	Recordkeeping and Calculation	Monthly
PM ₁₀ /PM _{2.5}	2.5.4	7.8 tons/yr	See Condition 2.5.4	Recordkeeping and Calculation	Monthly
Natural Gas Consumption	2.6	1869.2 MMscf/yr	N/A	Fuel meter	Monthly
Continuous Emission Monitoring System Requirements	2.7	N/A	N/A	See Condition 2.7	
Fuel Flow Meter	2.8	N/A	N/A	See Condition 2.8	
Sulfur Content of Natural Gas	2.9	Pipeline Quality Natural Gas (total sulfur content not to exceed 0.5 grains/100 SCF)	N/A	See Condition 2.9	
Btu Content of Natural Gas	2.10	N/A	N/A	ASTM Methods	Monthly
NSPS General Provisions	2.11	N/A	N/A	As required by NSPS General Provisions	Subject to NSPS General Provisions
Opacity	2.12	State Only Requirement: Not to Exceed 20% Not to exceed 20%, Except as Provided for Below For Certain Operational Activities Not to Exceed 30%, for a Period or Periods Aggregating More than Six (6) Minutes in any 60 Consecutive Minutes	N/A	Fuel Restriction	Only Natural Gas is Used as Fuel
Emission Calculation Methods	2.13	N/A	See Condition 2.13		
Acid Rain Requirements	2.14	See Section III of this Permit		Certification	Annually

- 2.1 Emissions of Nitrogen Oxides (NO_x) shall not exceed the following limitations:
 - 2.1.1 This source is located in a non-attainment area for ozone. The Reasonably Available Control Technology (RACT) requirements of Regulation Number 3, Part B, Section III.D.2.a. The following requirements were determined to be RACT for this source:
 - 2.1.1.1 A water injection system capable of limiting the concentration of NO_x in the exhaust as specified below (Colorado Construction Permit 09BO0958).
 - 2.1.1.2 Except as provided for below, emissions of NO_x shall not exceed 42 ppmvd at 15% O₂, on a 1-hour average. This standard applies to **each turbine** (Colorado Construction Permit 09BO0958)
 - 2.1.1.3 During periods of startup and shutdown, or combustion tuning and testing the limits of Condition 2.1.1.2 do not apply.
 - 2.1.1.4 During periods of combustion tuning and testing, emissions of NO_x shall not exceed 117.8 ppmvd at 15% O_2 on a 1-hour average. This limit is applicable to **each turbine** (Colorado Construction Permit 09BO0958)

Use of this NO_x emission limit for purposes of combustion tuning and/or testing shall not exceed 100 hours in any calendar year **for both turbines combined**. Records of the number of hours each turbine undergoes combustion tuning and/or testing shall be recorded and maintained and made available to the Division upon request.

- 2.1.1.5 Definition of Startup and Shutdown (Colorado Construction Permit 09BO0958, as modified under the provisions of Section I Condition 1.3):
 - a. "Startup" means the setting in operation of any air pollution source for any purpose. Setting in operation for these turbines begins when fuel is injected into the turbine. Setting in operation for these turbines ends 20 minutes after the turbine reaches and maintains a minimum load of 15 MW for 15 minutes, or 60 minutes after setting in operation, whichever occurs first.
 - b. "Shutdown" means the cessation of operation of any air pollution source for any purpose. The cessation of operation for this turbine begins when the command signal is initiated by the turbine operator to shutdown the unit and ends when fuel is no longer being fired in the turbine.
- 2.1.1.6 "Combustion Tuning and Testing" means the operation of the unit for the purpose of performing combustion tuning and testing operations after a unit overhaul (a turbine replacement as allowed under the Alternative Operating Scenario (see Condition 2.2 in Section I of this Operating Permit)) or as part of routine maintenance operations. Combustion tuning and testing can occur throughout the range of the operating conditions

Operating Permit 01OPBO238

(Colorado Construction Permit 09BO0958).

Compliance with the NO_x RACT emission limitations shall be monitored using the continuous emission monitoring system (CEMS) required by condition 2.7, as follows (Colorado Construction Permit 09BO0958 as modified under the provisions of Section I Condition 1.3):

- 2.1.1.7 For the purposes of this Condition 2.1.1.7 2.1.1.10, "valid CEMS data points" shall mean CEMS monitoring data that is collected while the unit is combusting fuel but not during periods of calibration, quality assurance, or preventive maintenance, performed pursuant to §75.21 and Appendix B of Part 75, periods of repair, periods of backups of data from the data acquisition and handling system, or recertification performed pursuant to 40 CFR §75.20.
- 2.1.1.8 Average NO_x concentration (ppm) values shall be calculated as specified in Conditions 2.1.1.9 2.1.1.10 for each clock hour that includes the minimum number of valid CEMS data points as follows:
 - a. At least one valid CEMS data point shall be collected from each quadrant of the clock hour in which the unit operated.
 - b. Notwithstanding the above, at least two valid CEMS data points shall be collected, separated by a minimum of 15 minutes, for each clock hour during which any of the QA/QC activities specified in Condition 2.1.1.7 occurred, where the unit operated for more than one quadrant of an hour.

Data used to generate average values as specified in Conditions 2.1.1.9 - 2.1.1.10 shall not include replaced data, nor shall the data be bias-adjusted. Replaced data shall be reported as monitor down time in the semi-annual reports required by Condition 4.4.

- 2.1.1.9 At the end of each clock hour, all valid CEMS data points that are NO_x concentration (ppm) values collected during periods of combustion tuning or testing shall be reduced to an average value for that hour. This value shall be compared to the limitation in Condition 2.1.1.4.
- 2.1.1.10 At the end of each clock hour, all valid CEMS data points that are NO_x concentration (ppm) values collected during periods that do not qualify as startup, shutdown or combustion tuning and testing shall be reduced to an average value for that hour. This value shall be compared to the limitation in Condition 2.1.1.2.
- 2.1.2 Total emissions of NO_x from the two (2) natural gas-fired combustion turbine generators and two (2) natural gas-fired inlet air heaters combined shall not exceed 78.0 tons per year (Colorado Construction Permit 09BO0958). Monthly emissions shall be calculated as follows:

Operating Permit 01OPBO238

Turbines:

For any hour in which fuel is combusted in the turbines, the permittee shall program the DAHS to calculate lb/hr NO_x emissions in accordance with the requirements in Section II Condition 4.1.1.3b of this Operating Permit and 40 CFR Part 75, including any replaced data and the data shall be bias-adjusted, if warranted.

Specifically hourly mass NO_x emissions (in lb/hr) shall be calculated by multiplying the hourly NO_x lb/MMBtu value (which includes replaced or bias-adjusted data, as applicable) by the hourly heat input value (MMBtu/hr). The hourly NO_x lb/MMBtu and heat input values shall be determined using equations F-5 and F-20 in Appendix F of 40 CFR Part 75. The resulting NO_x lb/hr value is then multiplied by the unit operating time for that hour to produce a NO_x lbs value. Hourly NO_x mass emissions (lbs) shall be summed and divided by 2000 lb/ton to determine monthly NO_x emissions (in tons).

Inlet Air Heaters:

Monthly emissions for the inlet air heaters shall be calculated by the end of the subsequent month using the procedure specified in Condition 2.13.1.

Monthly emissions (in tons) from the two (2) natural gas-fired combustion turbine generators and the two (1) natural gas-fired inlet air heaters combined shall be summed together and used in a twelve month rolling total to monitor compliance with the annual emission limitation. Each month a new twelve month total shall be calculated using the previous twelve months total.

- 2.2 Emissions of Carbon Monoxide (CO) shall not exceed the following limitations:
 - 2.2.1 This source is located in attainment/maintenance area for Carbon Monoxide. The Reasonably Available Control Technology (RACT) requirements of Regulation Number 3, Part B, Section III.D.2.a apply. The following requirements were determined to be RACT for this source:
 - 2.2.1.1 Good Combustion Practices shall be used to limit the concentration of CO in the exhaust as specified below. (Colorado Construction Permit 09BO0958, as modified under the provisions of Section I Condition 1.3)
 - 2.2.1.2 Except as provided for below, emissions of CO shall not exceed 100 ppmvd at 15% O₂, on a 1-hour average. This standard applies to **each turbine**.
 - 2.2.1.3 During periods of startup and shutdown, the limits of Condition 2.2.1.2 do not apply.
 - 2.2.1.4 Definition of Startup and Shutdown:
 - a. "Startup" shall have the same definitions as in Condition 2.1.1.5a

Operating Permit 01OPBO238

- b. "Shutdown" shall have the same definitions as in Condition 2.1.1.5b Compliance with the CO RACT emission limitations shall be monitored using the CEMS required by Condition 2.7, as follows:
- 2.2.1.5 For the purposes of this Condition 2.2.1.5 2.2.1.7, "valid CEMS data points" shall mean CEMS monitoring data that is collected while the unit is combusting fuel but not during periods of calibration, quality assurance, or preventive maintenance, performed pursuant to §75.21 and Appendix B of Part 75, periods of repair, periods of backups of data from the data acquisition and handling system, or recertification performed pursuant to 40 CFR §75.20.
- 2.2.1.6 Average CO concentration (ppm) values shall be calculated as specified in Condition 2.2.1.7 for each clock hour that includes the minimum number of valid CEMS data points as follows:
 - a. At least one valid CEMS data point shall be collected from each quadrant of the clock hour in which the unit operated.
 - b. Notwithstanding the above, at least two valid CEMS data points shall be collected, separated by a minimum of 15 minutes, for each clock hour during which any of the QA/QC activities specified in Condition 2.2.1.5 occurred, where the unit operated for more than one quadrant of an hour.

Data used to generate average values as specified in Condition 2.2.1.7 shall not include replaced data, nor shall the data be bias-adjusted. Replaced data shall be reported as monitor down time in the semi-annual reports required by Condition 4.4.

- 2.2.1.7 At the end of each clock hour, all valid CEMS data points that are CO concentration (ppm) values collected during periods that do not qualify as startup or shutdown shall be reduced to an average value for that hour. This value shall be compared to the limitation in Condition 2.2.1.2.
- 2.2.2 Total emissions of CO from the two (2) natural gas-fired combustion turbine generators and two (2) natural gas-fired inlet air heaters combined shall not exceed 181.6 tons per year (Colorado Construction Permit 09BO0958). Monthly emissions shall be calculated as follows:

Turbines:

For any hour in which fuel is combusted in the turbines, the permittee shall program the DAHS to calculate lb/hr CO emissions in accordance with the requirements in Section II Condition 4.1.1.3b of this Operating Permit and 40 CFR Part 75, including any replaced data if warranted.

Operating Permit 01OPBO238

Specifically hourly mass CO emissions (in lb/hr) shall be calculated by multiplying the hourly CO lb/MMBtu value (which includes replaced data in accordance with the provisions in Part 75 for NO_x replacement, as applicable) by the hourly heat input value (MMBtu/hr). The hourly CO lb/MMBtu and heat input values shall be determined using equations F-5 (except that the value of K is 7.27 x 10⁻⁸ for carbon monoxide) and F-20 in Appendix F of 40 CFR Part 75. The resulting CO lb/hr value is then multiplied by the unit operating time for that hour to produce a CO lbs value. Hourly CO mass emissions (lbs) shall be summed and divided by 2000 lb/ton to determine monthly CO emissions (in tons).

See Condition 4 for further details on applying 40 CFR Part 75 methods to the CO CEMS.

(Colorado Construction Permit 09BO0958 as modified under the provisions of Section I Condition 1.3)

Inlet Air Heaters:

Monthly emissions for the inlet air heaters shall be calculated by the end of the subsequent month using the procedure specified in Condition 2.13.1.

Monthly emissions (in tons) from the two (2) natural gas-fired combustion turbine generators and two (2) natural gas-fired inlet air heaters combined shall be summed together and used in a twelve month rolling total to monitor compliance with the annual emission limitation. Each month a new twelve month total shall be calculated using the previous twelve months total.

- 2.3 Sulfur Dioxide (SO₂) emissions shall not exceed the following limitations:
 - 2.3.1 These turbines are subject to 40 CFR Part 60 Subpart GG Standards of Performance for Stationary Gas Turbines, as adopted by reference in Colorado Regulation No. 6, Part A. The following limits and requirements apply to **each turbine**:
 - 2.3.1.1 No owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any stationary gas turbine any gases which contain sulfur dioxide in excess of 150 ppmvd at 15 percent oxygen and on a dry basis (§60.333(a)) **OR**
 - 2.3.1.2 No owner or operator subject to the provisions of this subpart shall burn in any stationary gas turbine any fuel which contains total sulfur in excess of 0.8 percent by weight (8000 ppmw) (§60.333(b)).

Compliance with the above requirements is presumed, in the absence of credible evidence to the contrary, since only pipeline quality natural gas that meets the requirements in Condition 2.9 is permitted to be used as fuel in these turbines (Colorado Construction Permit 09BO0958 as modified under the provisions of Section I Condition 1.3).

Operating Permit 01OPBO238

- 2.3.2 Sulfur Dioxide (SO₂) emissions **from each turbine** shall not exceed 0.35 lb/MMBtu, on a 3-hour rolling average (Colorado Regulation No 1, Section VI.B.4.c.(ii) and VI.B.2). Compliance this requirement is presumed, in the absence of credible evidence to the contrary, since only pipeline quality natural gas that meets the requirements in Condition 2.9 is permitted to be used as fuel in these turbines.
- 2.3.3 Total emissions of SO_2 from the two (2) natural gas-fired combustion turbine generators and two (2) natural gas-fired inlet air heaters combined shall not exceed 0.5 tons per year (Colorado Construction Permit 09BO0958). Monthly emissions shall be calculated as follows:

Turbines:

Monthly emissions shall be monitored using the monitoring method specified in 40 CFR Part 75, Appendix D.

Inlet Air Heaters:

Monthly emissions for the inlet air heaters shall be calculated by the end of the subsequent month using the procedure specified in Condition 2.13.1.

Monthly emissions (in tons) from the two (2) natural gas-fired combustion turbine generators and two (2) natural gas-fired inlet air heaters combined shall be summed together and used in a twelve month rolling total to monitor compliance with the annual emission limitation. Each month a new twelve month total shall be calculated using the previous twelve months total.

- 2.4 Volatile Organic Carbon (VOC) emissions are subject to the following requirements:
 - 2.4.1 This source is located in a non-attainment area for ozone. The Reasonably Available Control Technology (RACT) requirements of Regulation Number 3, Part B, Section III.D.2.a apply. The following requirements were determined to be RACT for this source:
 - 2.4.1.1 Good combustion practices and the use of pipeline quality natural gas shall be used to minimize emissions of VOC (Colorado Construction Permit 09BO0958):

Compliance with the above requirements is presumed, in the absence of credible evidence to the contrary, whenever:

The CO RACT requirements of Condition 2.2.1 are met AND

The pipeline quality natural gas requirements in Condition 2.9 are met.

2.4.2 Total emissions of VOC from the two (2) natural gas-fired combustion turbine generators and two (2) natural gas-fired inlet air heaters) combined shall not exceed

Operating Permit 01OPBO238

First Issued: November 1, 2003

Renewed: June 1, 2013

5.0 tons per year (Colorado Construction Permit 09BO0958). Monthly emissions shall be calculated as follows:

Turbines:

Monthly emissions for the turbines shall be calculated by the end of the subsequent month using the procedure specified in Condition 2.13.2.

Inlet Air Heaters:

Monthly emissions for the inlet air heaters shall be calculated by the end of the subsequent month using the procedure specified in Condition 2.13.1.

Monthly emissions (in tons) from the two (2) natural gas-fired combustion turbine generators and the two (2) natural gas-fired inlet air heaters combined shall be summed together and used in a twelve month rolling total to monitor compliance with the annual emission limitation. Each month a new twelve month total shall be calculated using the previous twelve months total.

- 2.5 Particulate Matter (PM) emissions shall not exceed the following limitations:
 - 2.5.1 Particulate Matter (PM) emissions **from each combustion turbine** shall not exceed 0.1 lb/MMBtu, the average of three (3) 1-hr tests (Colorado Regulation No. 1, Section III.A.1.b). In the absence of credible evidence to the contrary, compliance with the particulate matter limitation is presumed since only pipeline quality natural gas is permitted to be used as fuel in the turbines.

Note that the numeric PM standards for the turbines were determined using the design heat input for each turbine (347 MMBtu/hr for CT007 and 343 MMBtu/hr for CT 008) in the following equation:

$$PE = 0.5 \text{ x (FI)}^{-0.26}$$
 Where
$$PE = \text{particulate standard in lb/MMBtu}$$

$$FI = \text{Fuel Input in MMBtu/hr}$$

2.5.2 Particulate Matter (PM) emissions **from each inlet air heater** shall not exceed 0.3 lb/MMBtu, the average of three (3) 1-hr tests (Colorado Regulation No. 1, Section III.A.1.b). In the absence of credible evidence to the contrary, compliance with the particulate matter limitation is presumed since only pipeline quality natural gas is permitted to be used as fuel in the inlet air heaters.

Note that the numeric PM standards for the inlet heaters were determined using the design heat input for each inlet air heater (5 MMBtu/hr for AP007 and 6.5 MMBtu/hr for AP008) in the following equation:

$$PE = 0.5 \text{ x (FI)}^{-0.26}$$

Operating Permit 01OPBO238

Where PE = particulate standard in lb/MMBtu FI = Fuel Input in MMBtu/hr

2.5.3 This source is located in an attainment-maintenance area for PM₁₀ and is subject to the Reasonably Available Control Technology (RACT) requirements of Regulation Number 3, Part B, Section III.D.2.a. The following requirements were determined to be RACT for this source (Colorado Construction Permit 09BO0958):

Only pipeline-quality natural gas shall be used as fuel in the turbines and inlet air heaters.

Compliance with the above requirement is presumed, in the absence of credible evidence to the contrary, since only pipeline quality natural gas that meets the requirements in Condition 2.9 is permitted to be used as fuel in these turbines and inlet air heaters.

2.5.4 Total emissions of PM, PM₁₀ and PM_{2.5} from the two (2) natural gas-fired combustion turbine generators and two (2) natural gas-fired inlet air heaters combined shall not exceed 7.8 tons per year of each pollutant (Colorado Construction Permit 09BO0958 as modified under the provisions of Section I Condition 1.3). PM, PM₁₀ and PM_{2.5} limits include condensables. Monthly emissions shall be calculated as follows:

<u>Turbines:</u>

Monthly emissions for the turbines shall be calculated by the end of the subsequent month using the procedure specified in Condition 2.13.2.

Inlet Air Heaters:

Monthly emissions for the inlet air heaters shall be calculated by the end of the subsequent month using the procedure specified in Condition 2.13.1.

Monthly emissions (in tons) from the two (2) natural gas-fired combustion turbine generators and two (2) natural gas-fired inlet air heaters combined shall be summed together and used in a twelve month rolling total to monitor compliance with the annual emission limitation. Each month a new twelve month total shall be calculated using the previous twelve months total.

2.6 **Total** natural gas consumption **for the two (2) natural gas-fired combustion turbine generators and two (2) natural gas-fired inlet air heaters combined** shall not exceed 1869.2
MMscf/yr (Colorado Construction Permit 09BO0958). The natural gas consumption for the two natural gas-fired combustion turbine generators and the two natural gas-fired inlet air heaters shall be monitored and recorded monthly in accordance with the requirements of Condition 2.8.
Monthly natural gas consumption for the turbines and inlet air heaters shall be summed together and used in a rolling twelve month total to monitor compliance with the annual limitation. Each

Operating Permit 01OPBO238

month a new twelve month rolling total shall be calculated using the previous twelve months data.

- 2.7 **Each** turbine exhaust stack shall be equipped with a continuous emission monitoring system to measure and record the following (Colorado Construction Permit 09BO0958 as modified under the provisions of Section I Condition 1.3):
 - 2.7.1 Concentration of Oxides of Nitrogen; ppmvd corrected to 15% O₂, hourly average;
 - 2.7.2 Emissions of Oxides of Nitrogen; lb/hr, tons per month;
 - 2.7.3 Concentration of Carbon Monoxide; ppmvd corrected to 15% O₂, hourly average;
 - 2.7.4 Emissions of Carbon Monoxide; lb/hr, tons per month;
 - 2.7.5 Concentration of Oxygen, percent hourly average;
 - 2.7.6 Operating mode startup, shutdown and/or standard operation;
 - 2.7.7 Load, in MW, at which the turbine is operating

The continuous emission monitoring systems shall meet the requirements in Condition 4 of this Operating Permit. Monthly emissions of NO_x and CO from the continuous emission monitoring system shall be used as specified by Conditions 2.1.2 and 2.2.2 to monitor compliance with the annual NO_x and CO emission limits.

2.8 **Each turbine** shall be equipped with an in-line fuel flow meter that meets the requirements in 40 CFR Part 75 Appendix D to measure fuel combusted in each turbine. Fuel flow data shall be recorded on a data acquisition and handling system as specified in 40 CFR Part 75 Appendix D.

Inlet air heaters: Natural gas consumption from the inlet air heaters shall be monitored and recorded monthly.

The sum of fuel combusted in the turbines plus the inlet heaters shall be used to monitor compliance with the total natural gas consumption limit as specified in Condition 2.6.

2.9 The owner or operator shall maintain records demonstrating that the natural gas burned meets the definition of pipeline quality natural gas as defined in 40 CFR Part 72. Specifically, the owner or operator shall demonstrate that the natural gas burned has a total sulfur content less than 0.5 grains/100 SCF. The demonstration shall be made using any of the methods identified in 40 CFR Part 75, Appendix D, Section 2.3.1.4. These records shall be made available to the Division upon request. (Colorado Construction Permit 09BO0958 as modified under the provisions of Section I Condition 1.3)

Note that this Condition 2.9 shall also be used to monitor compliance with the fuel sulfur requirements of Condition 2.3.1.2.

Operating Permit 01OPBO238

- 2.10 The Btu content of the natural gas used to fuel this equipment shall be determined using the procedures set forth in 40 CFR Part 75. Calculation of monthly emissions outlined under Condition 2.13 shall be based on the most recent Btu determination. The Btu content shall be based on the average of the saturated and dry gross heating values (HHV) of the fuel. (Colorado Construction Permit 09BO0958 as modified under the provisions of Section I Condition 1.3).
- 2.11 Regulation No. 6, Part A, Subpart A, General Provisions apply as follows:
 - 2.11.1 No article, machine, equipment or process shall be used to conceal an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere. (40 CFR Part 60 Subpart A §60.12, as adopted by reference in Colorado Regulation No. 6, Part A)
 - 2.11.2 At all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. (40 CFR Subpart A §60.11(d), as adopted by reference in Colorado Regulation No. 6, Part A)
- 2.12 The turbines/ inlet air heaters are subject to the following opacity requirements:
 - 2.12.1 **State-Only Requirement:** No owner or operator may discharge, or cause the discharge into the atmosphere of any particulate matter which is greater than 20% opacity (Colorado Regulation No. 6, Part B, Section II.C.3). This opacity standard applies to **each turbine and each inlet air heater.**

This opacity standard applies at all times except during periods of startup, shutdown and malfunction (40 CFR Part 60 Subpart A §60.11(c), as adopted by reference in Colorado Regulation No. 6, Part B, Section I.A).

Note that this opacity requirement is more stringent than the opacity requirement in Condition 2.12.3 during periods of building of a new fire, cleaning of fire boxes, soot blowing, process modifications and adjustment or occasional cleaning of control equipment.

2.12.2 Except as provided for in Condition 2.12.3 below, no owner or operator of a source shall allow or cause the emission into the atmosphere of any air pollutant which is in excess of 20% opacity (Colorado Regulation No. 1, Section II.A.1). This opacity standard applies to **each turbine and each inlet air heater.**

Operating Permit 01OPBO238

2.12.3 No owner or operator of a source shall allow or cause to be emitted into the atmosphere any air pollutant resulting from the building of a new fire, cleaning of fire boxes, soot blowing, start-up, process modifications, or adjustment or occasional cleaning of control equipment which is in excess of 30% opacity for a period or periods aggregating more than six (6) minutes in any sixty (60) consecutive minutes (Colorado Regulation No. 1, Section II.A.4). This opacity standard applies to each turbine and each inlet air heater.

In the absence of credible evidence to the contrary, each turbine and inlet air heater, shall be presumed to be in compliance with the above opacity requirements whenever natural gas is used as a fuel.

2.13 Emission calculation methods

2.13.1 Monthly emissions from the inlet air heaters shall be calculated using the monthly natural gas consumption for the heaters (as determined by Condition 2.8), the heat content of the natural gas (as determined by Condition 2.10) and the emission factors identified in the table below in the following equation:

Pollutant	Emission Factor (lb/MMBtu)	Source of Emission Factor
	Inlet Air Heaters	
NOx	0.0362	
CO	0.0368	
SO_2	0.0006	
VOC	0.0058	Manufacturer
PM	0.0060	
PM_{10}	0.0060	
PM _{2.5}	0.0060	

 $\frac{Tons}{Month} = \frac{Emission Factor (lbs/MMBtu) \times Gas Use (MMScf/Month) \times Heat Content of Gas (MMBtu/MMScf)}{2000 (lbs/ton)}$

2.13.2 Monthly emissions of VOC, PM, PM₁₀ and PM_{2.5} from the turbines shall be calculated using the emission factors identified in the table below in the following equation:

	Emission Factor (lb/MMBtu)	
Pollutant	Turbines	Source of Emission Factor
VOC	CT7: 0.0029	
	CT8: 0.0039	
PM	0.0091	Manufacturer
PM_{10}	0.0091	
PM _{2.5}	0.0091	

 $\frac{\text{Tons}}{\text{Month}} = \frac{\text{Emission Factor (lbs/MMBtu)} \times \text{Heat Input (MMBtu/Month)}}{2000 \text{ (lbs/ton)}}$

The monthly heat input to the turbines shall be determined using the data acquisition and handling system (DAHS) for the CEMS required by Condition 2.7.

2.14 These units are subject to the Title IV Acid Rain Requirements. As specified in 40 CFR Part 72.72(b)(1)(viii), the acid rain permit requirements shall be a complete and segregable portion of the Operating Permit. As such, the requirements are found in Section III of this permit.

- 3. Requirements Related to the Expiration of the Power Purchase Agreement Between Public Service Company and SWG Colorado, LLC (Colorado Construction Permit 09BO0958)
 - 3.1 Renewal or Extension of the Power Purchase Agreement (PPA) between Public Service Company and SWG Colorado, LLC concerning the Valmont Combustion Turbine Facility: The emission and fuel use limits that are applicable to this source beginning October 1, 2012 rely upon the expiration of the PPA on September 30, 2012. In the event that the PPA is extended or renewed past September 30, 2012 the emission and fuel use limits shall revert as follows:
 - 3.1.1 The annual emission limits shall revert to those applicable prior to October 1, 2012 (i.e., Conditions 2.1.2, 2.2.2, 2.3.3, 2.4.2 and 2.5.4 shall no longer apply and Conditions 1.1.2, 1.2.2, 1.3.3, 1.4.2 and 1.5.4 shall become applicable)
 - 3.1.2 The insignificant activity tracking requirement of Condition 1.14 shall become applicable.
 - 3.1.3 The fuel use limit shall revert to the limit applicable prior to October 1, 2012 (i.e., Condition 2.6 shall no longer apply and Condition 1.6 shall become applicable).

The reverted emission and fuel use limits shall be become applicable on the effective date of the extended or renewed PPA. The owner or operator shall notify the Division of the status of the PPA and shall submit revised Air Pollutant Emission Notices (APENs) that reflect the revised limits within thirty (30) days of the PPA renewal or extension date.

- 3.2 **Future Agreements concerning the Valmont Combustion Turbine Facility and the Valmont Power Plant:** In the event that the owner or operator enters into any future agreement with an entity that owns or operates the Valmont Power Plant that would establish common control between the two facilities, the emission and fuel use limits shall revert as follows:
 - 3.2.1 The annual emission limits shall revert to those applicable prior to October 1, 2012 (i.e., Conditions 2.1.2, 2.2.2, 2.3.3, 2.4.2 and 2.5.4 shall no longer apply and Conditions 1.1.2, 1.2.2, 1.3.3, 1.4.2 and 1.5.4 shall become applicable)
 - 3.2.2 The insignificant activity tracking requirement of Condition 1.14 shall become applicable.
 - 3.2.3 The fuel use limit shall revert to the limit applicable prior to October 1, 2012 (i.e., Condition 2.6 shall no longer apply and Condition 1.6 shall become applicable).

The reverted emission and fuel use limits shall be become applicable on the date that common control is established between the Valmont Combustion Turbine Facility and the Valmont Power Plant according to the terms of the agreement. The owner or operator shall notify the Division of the status of any such agreement and shall submit revised Air Pollutant Emission Notices (APENs) that reflect the revised limits within thirty (30) days of the date that common control is established.

Operating Permit 01OPBO238

Air Pollution Control Division Colorado Operating Permit Permit # 01OPBO238 SWG Colorado, LLC Valmont Combustion Turbine Facility Page 37

Alternatively, the permittee may apply to the Division to allow the October 1, 2012 emission and fuel use limits to survive future agreement(s) between the Valmont Combustion Turbine Facility and the Valmont Power Plant by requesting a modification to this Operating Permit. The Division will determine the applicable requirements based on the configuration of the facilities and the regulations in effect at the time of the application, and will revise the Operating Permit as appropriate.

Operating Permit 01OPBO238 First Issued: November 1, 2003

4. Continuous Emission Monitoring Requirements

Note that the continuous emission monitoring requirements identified in this Condition **for each turbine** are in addition to the continuous emission monitoring requirements required by the Acid Rain Program, which are identified in Section III of this Operating Permit.

The permittee shall have 60 days following the issuance date [June 1, 2013] of this Operating Permit for software revisions and testing to meet the requirements specified in this section.

- 4.1 Equipment and QA/QC Requirements
 - 4.1.1 The Continuous Emission Monitoring Systems (CEMS) are subject to the following requirements (Colorado Construction Permit 09BO0958 as modified under the provisions of Section I Condition 1.3):
 - 4.1.1.1 Except as provided for below in paragraphs a through d, the **CO monitors for the turbines** are subject to the applicable requirements of 40 CFR Part 60. The monitoring systems shall meet the equipment, installation and performance specifications of 40 CFR Part 60 Appendix B, Performance Specification 4/4A. These CEMS are subject to the quality assurance/quality control requirements in 40 CFR Part 60 Appendix F and Subpart A §60.13 and Condition 4.1.1.3 of this Operating Permit.
 - a. The CO CEMS data shall meet the applicable "primary equipment hourly operating requirements" for hourly average calculation methodology specified in 40 CFR Part 75 Subpart B § 75.10(d).
 - b. CO monitor relative accuracy (RA) testing will be performed in ppm
 @ 15% O₂ measurement units, and will be performed according to 40
 CFR Part 60, Appendix B, Performance Specification 4/4A.
 - c. Relative accuracy test audit (RATA) frequency will be determined according to 40 CFR Part 75 Appendix B
 - d. For Cylinder Gas Audits, the owner or operator shall follow the requirements for linearity checks according to 40 CFR Part 75 Appendix B, including the specified ranges and testing schedule/frequency.
 - 4.1.1.2 The NO_x (and diluents) monitors for the turbines are subject to the applicable requirements of 40 CFR Part 75. The monitoring systems shall meet the equipment, installation and performance specification requirements in 40 CFR Part 75, Appendix A. These CEMS shall meet the quality assurance/quality control requirements in 40 CFR Part 75, Appendix B and the conversion procedures of Appendix F and Condition 4.1.1.3 of this Operating Permit.
 - 4.1.1.3 The NO_x and CO CEMS for the turbines are subject to the following requirements:

Operating Permit 01OPBO238

- a. Relative Accuracy Test Audits (RATAs): RATAs shall be conducted in the units (e.g., lb/MMBtu, ppm) of the emission limitation for all of the emission limitations that are applicable to the emissions unit. The RATAs for emissions units that have annual emission limits (tons/yr) will be conducted in terms of pounds per hour (lb/hr).
- b. The DAHS shall be able to record and manipulate the data in the units (e.g., lb/MMBtu, ppm) of the emission limitation and meet the reporting requirements for all of the emission limitations that are applicable to the emissions unit.
- 4.1.2 Quality assurance/quality control plans shall be prepared for the continuous emission monitoring system as follows:
 - 4.1.2.1 The quality assurance/quality control plan for the **CO monitors for the turbines** shall be prepared in accordance with the applicable requirements in 40 CFR Part 75, Appendix B.
 - 4.1.2.2 The quality assurance/quality control plan for the NO_x (and diluent monitors) for the turbines shall be prepared in accordance with the applicable requirements in 40 CFR Part 75, Appendix B.

The quality assurance/quality control plans shall be made available to the Division upon request. Revisions shall be made to the plans at the request of the Division. For emission units subject to Acid Rain regulations, the NSPS regulations, and the State regulations, the Division will allow the owner or operator to use the QA/QC tests of Part 75.

4.2 General Provisions

- 4.2.1 **CO monitors for turbines:** The owner or operator shall ensure that all continuous emission monitoring systems required are in operation and monitoring unit emissions at all times except for monitoring system breakdowns, repairs, calibration checks and zero and span adjustments required under 40 CFR Part 60 Subpart A §60.13(d) and 40 CFR Part 60 Subpart A §60.13(e).
- 4.2.2 **NO**_x (and diluents) monitors for turbines: The owner or operator shall ensure that all continuous emission monitoring systems required are in operation and monitoring unit emissions at all times that the affected unit combusts any fuel except as provided in 40 CFR §75.11(e) and during periods of calibration, quality assurance, or preventative maintenance performed pursuant to 40 CFR Part 75, §75.21 and Appendix B, periods of repair, periods of backups of data from the data acquisition and handling system or recertification performed pursuant to 40 CFR §75.20 (40 CFR Part 75 §75.10(d)).
- 4.2.3 Alternative monitoring systems, alternative reference methods, or any other alternatives for the required continuous emission monitoring systems shall not be

Operating Permit 01OPBO238

used without having obtained prior written approval from the appropriate agency, either the Division or the U.S. EPA, depending on which agency is authorized to approve such alternative under applicable law. Any alternative continuous emission monitoring systems or continuous opacity monitoring systems must be certified in accordance with the applicable requirements of 40 CFR Part 60 or 40 CFR Part 75 prior to use.

- 4.2.4 All test and monitoring equipment, methods, procedures and reporting shall be subject to the review and approval by the appropriate agency, either the Division or the U.S. EPA, depending on which agency is authorized to approve such alternative under applicable law, prior to any official use. The Division shall have the right to inspect such equipment, methods and procedures and data obtained at any time. The Division may provide a witness(s) for any and all tests as Division resources permit.
- 4.2.5 A file suitable for inspection shall be maintained of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required by applicable portions of 40 CFR Part 60 Subpart A and Appendices B and F and 40 CFR Part 75.
- 4.2.6 Records shall be maintained of the occurrence and duration of any startup, shutdown, or malfunction in the operation of the source; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative (40 CFR Part 60 Subpart A § 60.7(b))
- 4.3 Data Replacement Requirements for each turbine CEMS
 - 4.3.1 For periods when quality assured data is not available from the continuous emission monitoring systems the data replacement procedures in 40 CFR Part 75 Subpart D shall be used for determining the total (annual) emissions. Although CO emissions are not specifically referenced in the Subpart D procedures, the CEMS data acquisition system shall be programmed to substitute CO emissions using the same procedures specified for NO_x. For purposes of monitoring compliance with the annual emission limitations (tons/yr), replaced and bias-adjusted data shall be included when assessing compliance with the annual limitations. Note that since CO emissions are not subject to requirements in 40 CFR Part 75 the CO emission data is not required to be bias-adjusted.
- 4.4 Recordkeeping and Reporting Requirements
 - 4.4.1 The owner or operator of a facility required to install, maintain, and calibrate continuous monitoring equipment shall submit to the Division, by the end of the calendar month following the end of each semi-annual period, a report of excess

Operating Permit 01OPBO238

emissions for all pollutants monitored for that semi-annual period (40 CFR Part 60 Subpart A §60.7(c)). Reports shall consist of the following information for all pollutants monitored for the semi-annual period and all applicable limits:

- 4.4.1.1 The magnitude of excess emissions computed in accordance with 40 CFR Part 60 Subpart A § 60.13(h), any conversion factor(s) used, and the date and time of commencement and completion of each time period of excess emissions and the process operating time during the reporting period (40 CFR Part 60 Subpart A § 60.7(c)(1)).
- 4.4.1.2 Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the affected facility. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted (40 CFR Part 60 Subpart A § 60.7(c)(2)).
- 4.4.1.3 The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments (40 CFR Part 60 Subpart A § 60.7(c)(3)).
- 4.4.1.4 When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report (40 CFR Part 60 Subpart A § 60.7(c)(4)).
- 4.4.2 The owner or operator of a facility required to install, maintain, and calibrate continuous monitoring equipment shall submit to the Division, by the end of the calendar month following the end of each semi-annual period, a summary report for that semi-annual period (40 CFR Part 60 Subpart A § 60.7(c)). One summary report form shall be submitted for each pollutant monitored (40 CFR Part 60 Subpart A 60.7(d)). This report shall contain the information and be presented in a format approved by the Division.

If the total duration of excess emissions for the reporting period is less than 1 percent of the total operating time for the reporting period and continuous monitoring system (CMS) downtime is less than 5 percent of the total operating time for the reporting period, only the summary report form shall be submitted and the excess emission report described in Condition 4.4.1 need not be submitted unless required by the Division (40 CFR Part 60 Subpart A § 60.7(d)(1)).

If the total duration of excess emissions for the reporting period is 1 percent or greater of the total operating time for the reporting period or the total CMS downtime for the reporting period is 5 percent or greater of the total operating time for the reporting period, the summary report form and the excess emission report described in Condition 4.4.1 shall both be submitted (40 CFR Part 60 Subpart A § 60.7(d)(1)).

SECTION III - Acid Rain Requirements

1. Designated Representative and Alternate Designated Representative

Designated Representative:

Name: Gregg Trewitt

Title: VP Operations & Technical Services

Phone: (303) 623-4111

Alternate Designated Representative

Name: Randy Fox

Title: Director of Environmental Services and Safety

Phone: (303) 623-3013

2. Sulfur Dioxide Emission Allowances and Nitrogen Oxide Emission Limitations.

CT007**	2012	2013	2014	2015	2016	2017
SO ₂ Allowances, per 40 CFR Part 73.10(b), Table 2	0*	0*	0*	0*	0*	0*
NO _x Limits	This Unit Has No Title IV NO _x Limits (see Section 5)					

CT008**	2012	2013	2014	2015	2016	2017
SO ₂ Allowances, per 40 CFR Part 73.10(b), Table 2	0*	0*	0*	0*	0*	0*
NO _x Limits	This Unit Has No Title IV NO _x Limits (see Section 5)					

^{*} Under the provisions of § 72.84(a) any allowance allocations to, transfers to and deductions from an affected unit's Allowance Tracking System account is considered an automatic permit amendment and as such no revision to the permit is necessary. Numerical allowances shown in this table are from the July 2011 edition of the CFR (total annual allowances for years 2010 and beyond in table 2 of § 73.10(b)).

3. Standard Requirements

Combustion Turbines CT007 and CT008 of this facility are subject to and the source has certified that they will comply with the following standard conditions.

Operating Permit 01OPBO238 First Issued: November 1, 2003

^{**} These units are designated as CT7 and CT8 in Acid Rain and Greenhouse Gas Reports

Permit Requirements

- (1) The designated representative of each affected source and each affected unit at the source shall:
 - (i) Submit a complete Acid Rain permit application (including a compliance plan) under 40 CFR part 72 in accordance with the deadlines specified in 40 CFR 72.30; and
 - (ii) Submit in a timely manner any supplemental information that the Division determines is necessary in order to review an Acid Rain permit application and issue or deny an Acid Rain permit;
- (2) The owners and operators of each affected source and each affected unit at the source shall:
 - (i) Operate the unit in compliance with a complete Acid Rain permit application or a superseding Acid Rain permit issued by the Division; and
 - (ii) Have an Acid Rain Permit.

Monitoring Requirements

- (1) The owners and operators and, to the extent applicable, designated representative of each affected source and each affected unit at the source shall comply with the monitoring requirements as provided in 40 CFR part 75.
- (2) The emissions measurements recorded and reported in accordance with 40 CFR part 75 shall be used to determine compliance by the source or unit, as appropriate, with the Acid Rain emissions limitations and emissions reduction requirements for sulfur dioxide and nitrogen oxides under the Acid Rain Program.
- (3) The requirements of 40 CFR part 75 shall not affect the responsibility of the owners and operators to monitor emissions of other pollutants or other emissions characteristics at the unit under other applicable requirements of the Federal Clean Air Act and other provisions of the operating permit for the source.

Sulfur Dioxide Requirements

- (1) The owners and operators of each source and each affected unit at the source shall:
 - (i) Hold allowances, as of the allowance transfer deadline, in the source's compliance account (after deductions under 40 CFR 73.34(c)), not less than the total annual emissions of sulfur dioxide for the previous calendar year from the affected units at the source; and
 - (ii) Comply with the applicable Acid Rain emissions limitations for sulfur dioxide.
- (2) Each ton of sulfur dioxide emitted in excess of the Acid Rain emissions limitations for sulfur dioxide shall constitute a separate violation of the Federal Clean Air Act.

Operating Permit 01OPBO238 First Issued

- (3) An affected unit shall be subject to the requirements under paragraph (1) of the sulfur dioxide requirements as follows:
 - Starting January 1, 2000, an affected unit under 40 CFR 72.6(a)(2); or (i)
 - Starting on the later of January 1, 2000 or the deadline for monitor certification under 40 (ii) CFR part 75, an affected unit under 40 CFR 72.6(a)(3).
- (4) Allowances shall be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain Program.
- (5) An allowance shall not be deducted in order to comply with the requirements under paragraph (1) of the sulfur dioxide requirements prior to the calendar year for which the allowance was allocated.
- (6) An allowance allocated by the Administrator under the Acid Rain Program is a limited authorization to emit sulfur dioxide in accordance with the Acid Rain Program. No provision of the Acid Rain Program, the Acid Rain permit application, the Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8 and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization.
- (7) An allowance allocated by the Administrator under the Acid Rain Program does not constitute a property right.

Nitrogen Oxides Requirements. The owners and operators of the source and each affected unit at the source shall comply with the applicable Acid Rain emissions limitation for nitrogen oxides.

Excess Emissions Requirements.

- (1) The designated representative of an affected source that has excess emissions in any calendar year shall submit a proposed offset plan to the Administrator of the U. S. EPA, as required under 40 CFR part 77.
- (2) The owners and operators of an affected source that has excess emissions in any calendar year shall:
 - (i) Pay without demand, to the Administrator of the U. S. EPA, the penalty required, and pay upon demand the interest on that penalty, as required by 40 CFR part 77; and
 - Comply with the terms of an approved offset plan, as required by 40 CFR part 77. (ii)

Recordkeeping and Reporting Requirements.

(1) Unless otherwise provided, the owners and operators of the source and each affected unit at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time prior to the end of 5 years, in writing by the Administrator or the Division:

Operating Permit 01OPBO238 First Issued: November 1, 2003

- (i) The certificate of representation for the designated representative for the source and each affected unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation, in accordance with 40 CFR 72.24; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation changing the designated representative;
- (ii) All emissions monitoring information, in accordance with 40 CFR part 75, provided that to the extent that 40 CFR provides for a 3-year period of recordkeeping, the 3-year period shall apply.
- (iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the Acid Rain Program; and,
- (iv) Copies of all documents used to complete an Acid Rain permit application and any other submission under the Acid Rain Program or to demonstrate compliance with the requirements of the Acid Rain Program.
- (2) The designated representative of an affected source and each affected unit at the source shall submit the reports and compliance certifications required under the Acid Rain Program, including those under 40 CFR part 72 subpart I and 40 CFR part 75.

Liability.

- (1) Any person who knowingly violates any requirement or prohibition of the Acid Rain Program, a complete Acid Rain permit application, an Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8, including any requirement for the payment of any penalty owed to the United States, shall be subject to enforcement pursuant to section 113(c) of the Federal Clean Air Act.
- (2) Any person who knowingly makes a false, material statement in any record, submission, or report under the Acid Rain Program shall be subject to criminal enforcement pursuant to section 113(c) of the Federal Clean Air Act and 18 U.S.C. 1001.
- (3) No permit revision shall excuse any violation of the requirements of the Acid Rain Program that occurs prior to the date that the revision takes effect.
- (4) Each affected source and each affected unit shall meet the requirements of the Acid Rain Program.
- (5) Any provision of the Acid Rain Program that applies to an affected source (including a provision applicable to the designated representative of an affected source) shall also apply to the owners and operators of such source and of the affected units at the source.
- (6) Any provision of the Acid Rain Program that applies to an affected unit (including a provision applicable to the designated representative of an affected unit) shall also apply to the owners and operators of such unit.

Operating Permit 01OPBO238

(7) Each violation of a provision of 40 CFR parts 72, 73, 74, 75, 76, 77, and 78 by an affected source or affected unit, or by an owner or operator or designated representative of such source or unit, shall be a separate violation of the Federal Clean Air Act.

<u>Effect on Other Authorities.</u> No provision of the Acid Rain Program, an Acid Rain permit application, an Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8 shall be construed as:

- (1) Except as expressly provided in title IV of the Federal Clean Air Act, exempting or excluding the owners and operators and, to the extent applicable, the designated representative of an affected source or affected unit from compliance with any other provision of the Federal Clean Air Act, including the provisions of title I of the Federal Clean Air Act relating to applicable National Ambient Air Quality Standards or State Implementation Plans;
- (2) Limiting the number of allowances a unit can hold; provided, that the number of allowances held by the unit shall not affect the source's obligation to comply with any other provisions of the Federal Clean Air Act;
- (3) Requiring a change of any kind in any State law regulating electric utility rates and charges, affecting any State law regarding such State regulation, or limiting such State regulation, including any prudence review requirements under such State law;
- (4) Modifying the Federal Power Act or affecting the authority of the Federal Energy Regulatory Commission under the Federal Power Act; or,
- (5) Interfering with or impairing any program for competitive bidding for power supply in a State in which such program is established.

4. Reporting Requirements

Reports shall be submitted to the addresses identified in Appendix D.

Pursuant to 40 CFR Part 75.64 quarterly reports and compliance certification requirements shall be submitted to the Administrator **within 30 days after the end of the calendar quarter**. The contents of these reports shall meet the requirements of 40 CFR 75.64.

Pursuant to 40 CFR Part 75.65 excess emissions of opacity shall be reported to the Division. These reports shall be submitted in a format approved by the Division.

Revisions to this permit shall be made in accordance with 40 CFR Part 72, Subpart H, §§ 72.80 through 72.85 (as adopted by reference in Colorado Regulation 18). Permit modification requests shall be submitted to the Division at the address identified in Appendix D.

5. Comment, Notes and Justifications

Combustion Turbines No. 7 and 8 burn natural gas only. The NO_x limitations in 40 CFR Part 76 are only applicable to coal-fired utility units.

Operating Permit 01OPBO238 First Issued: November 1, 2003

SECTION IV - Permit Shield

Regulation No. 3, 5 CCR 1001-5, Part C, §§ I.A.4, V.D., & XIII.B; § 25-7-114.4(3)(a), C.R.S.

1. Specific Non-Applicable Requirements

Based on the information available to the Division and supplied by the applicant, the following parameters and requirements have been specifically identified as non-applicable to the facility to which this permit has been issued. This shield does not protect the source from any violations that occurred prior to or at the time of permit issuance. In addition, this shield does not protect the source from any violations that occur as a result of any modifications or reconstruction on which construction commenced prior to permit issuance.

No parameters or requirements have been specifically identified in the application as non-applicable to this facility.

2. General Conditions

Compliance with this Operating Permit shall be deemed compliance with all applicable requirements specifically identified in the permit and other requirements specifically identified in the permit as not applicable to the source. This permit shield shall not alter or affect the following:

- 2.1 The provisions of §§ 25-7-112 and 25-7-113, C.R.S., or § 303 of the federal act, concerning enforcement in cases of emergency;
- 2.2 The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;
- 2.3 The applicable requirements of the federal Acid Rain Program, consistent with § 408(a) of the federal act;
- 2.4 The ability of the Air Pollution Control Division to obtain information from a source pursuant to §25-7-111(2)(I), C.R.S., or the ability of the Administrator to obtain information pursuant to § 114 of the federal act;
- 2.5 The ability of the Air Pollution Control Division to reopen the Operating Permit for cause pursuant to Regulation No. 3, Part C, § XIII.
- 2.6 Sources are not shielded from terms and conditions that become applicable to the source subsequent to permit issuance.

Operating Permit 01OPBO238 First Issued: November 1, 2003

3. Streamlined Conditions

The following applicable requirements have been subsumed within this operating permit using the pertinent streamlining procedures approved by the U.S. EPA. For purposes of the permit shield, compliance with the listed permit conditions will also serve as a compliance demonstration for purposes of the associated subsumed requirements.

Permit Condition(s)	Streamlined (Subsumed) Requirements
Section II, Conditions 1.3.2 and 2.3.2	Regulation No. 6, Part B, Section II.D.3.b [SO ₂ emissions not to exceed 0.35 lbs/MMBtu] – State-only Requirement
Section II, Conditions 1.5.1, 1.5.2, 2.5.1, and 2.5.2	Regulation No. 6, Part B, Section II.C.3 [PM emissions not to exceed 0.1 lb/MMBtu for turbines and inlet air heaters] – State-only Requirement
Section II, Conditions 1.1.1.2, 1.1.1.4, 2.1.1.2 and 2.1.1.4	40 CFR Part 60 Subpart GG §60.332(b) & (a)(1) as adopted by reference in Colorado Regulation No. 6, Part A [NO _x emissions shall not exceed 117.8 at 15% O ₂ and ISO standard ambient conditions]
Section II, Conditions 1.9 and 2.9	40 CFR Part 60 Subpart GG §60.334(h)(3), as adopted by reference in Colorado Regulation No. 6, Part 1 [monitor sulfur content of fuel]
Section II, Conditions 1.11 and 2.11	Regulation No. 6, Part B, Section I [general provisions] – State-Only Requirement
Section II, Conditions 3.1 and 3.2	Colorado Construction Permit 09BO0953 (Initial Approval, Modification No. 1) Condition 2 and General Terms and Conditions – Condition 6 [permit shall expire if modification does not commence within 18 months]
Section II, Conditions 1.1.1.7 - 1.1.1.10 & 1.7 2.1.1.7 - 2.1.1.10 & 2.7	40 CFR Part 60 Subpart GG § 60.334(j)(1)(iii), as adopted by reference in Colorado Regulation No. 6, Part A [definition of hour of excess emissions]
Section II, Conditions 1.11 and 2.11	Colorado Construction Permit 09BO0953 (Initial Approval, Modification No. 1) Condition 4 [identify good combustion practices in an Operations and Maintenance Plan]

Operating Permit 01OPBO238

SECTION V - General Permit Conditions (ver 5/22/2012)

1. **Administrative Changes**

Regulation No. 3, 5 CCR 1001-5, Part A, § III.

The permittee shall submit an application for an administrative permit amendment to the Division for those permit changes that are described in Regulation No. 3, Part A, § I.B.1. The permittee may immediately make the change upon submission of the application to the Division.

2. **Certification Requirements**

Regulation No. 3, 5 CCR 1001-5, Part C, §§ III.B.9., V.C.16.a.& e. and V.C.17.

- Any application, report, document and compliance certification submitted to the Air Pollution Control Division pursuant to Regulation No. 3 or the Operating Permit shall contain a certification by a responsible official of the truth, accuracy and completeness of such form, report or certification stating that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete.
- All compliance certifications for terms and conditions in the Operating Permit shall be submitted to the Air Pollution b. Control Division at least annually unless a more frequent period is specified in the applicable requirement or by the Division in the Operating Permit.
- Compliance certifications shall contain: c.
 - (i) the identification of each permit term and condition that is the basis of the certification;
 - (ii) the compliance status of the source;
 - (iii) whether compliance was continuous or intermittent;
 - method(s) used for determining the compliance status of the source, currently and over the reporting (iv) period; and
 - such other facts as the Air Pollution Control Division may require to determine the compliance status of the (v)
- All compliance certifications shall be submitted to the Air Pollution Control Division and to the Environmental d. Protection Agency at the addresses listed in Appendix D of this Permit.
- If the permittee is required to develop and register a risk management plan pursuant to § 112(r) of the federal act, the e. permittee shall certify its compliance with that requirement; the Operating Permit shall not incorporate the contents of the risk management plan as a permit term or condition.

3. **Common Provisions**

Common Provisions Regulation, 5 CCR 1001-2 §§ II.A., II.B., II.C., II.E., II.F., II.I, and II.J

To Control Emissions Leaving Colorado

When emissions generated from sources in Colorado cross the State boundary line, such emissions shall not cause the air quality standards of the receiving State to be exceeded, provided reciprocal action is taken by the receiving State.

Operating Permit 01OPBO238 First Issued: November 1, 2003 Renewed: June 1, 2013 b. Emission Monitoring Requirements

The Division may require owners or operators of stationary air pollution sources to install, maintain, and use instrumentation to monitor and record emission data as a basis for periodic reports to the Division.

c. Performance Testing

The owner or operator of any air pollution source shall, upon request of the Division, conduct performance test(s) and furnish the Division a written report of the results of such test(s) in order to determine compliance with applicable emission control regulations.

Performance test(s) shall be conducted and the data reduced in accordance with the applicable reference test methods unless the Division:

- (i) specifies or approves, in specific cases, the use of a test method with minor changes in methodology;
- (ii) approves the use of an equivalent method;
- (iii) approves the use of an alternative method the results of which the Division has determined to be adequate for indicating where a specific source is in compliance; or
- (iv) waives the requirement for performance test(s) because the owner or operator of a source has demonstrated by other means to the Division's satisfaction that the affected facility is in compliance with the standard. Nothing in this paragraph shall be construed to abrogate the Commission's or Division's authority to require testing under the Colorado Revised Statutes, Title 25, Article 7, and pursuant to regulations promulgated by the Commission.

Compliance test(s) shall be conducted under such conditions as the Division shall specify to the plant operator based on representative performance of the affected facility. The owner or operator shall make available to the Division such records as may be necessary to determine the conditions of the performance test(s). Operations during period of startup, shutdown, and malfunction shall not constitute representative conditions of performance test(s) unless otherwise specified in the applicable standard.

The owner or operator of an affected facility shall provide the Division thirty days prior notice of the performance test to afford the Division the opportunity to have an observer present. The Division may waive the thirty day notice requirement provided that arrangements satisfactory to the Division are made for earlier testing.

The owner or operator of an affected facility shall provide, or cause to be provided, performance testing facilities as follows:

- (i) Sampling ports adequate for test methods applicable to such facility;
- (ii) Safe sampling platform(s);
- (iii) Safe access to sampling platform(s); and
- (iv) Utilities for sampling and testing equipment.

Each performance test shall consist of at least three separate runs using the applicable test method. Each run shall be conducted for the time and under the conditions specified in the applicable standard. For the purpose of determining compliance with an applicable standard, the arithmetic mean of results of at least three runs shall apply. In the event that a sample is accidentally lost or conditions occur in which one of the runs must be discontinued because of forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances beyond the owner or operator's control, compliance may, upon the Division's approval, be determined using the arithmetic mean of the results of the two other runs.

Operating Permit 01OPBO238

Nothing in this section shall abrogate the Division's authority to conduct its own performance test(s) if so warranted.

d. Affirmative Defense Provision for Excess Emissions during Malfunctions

> An affirmative defense to a claim of violation under these regulations is provided to owners and operators for civil penalty actions for excess emissions during periods of malfunction. To establish the affirmative defense and to be relieved of a civil penalty in any action to enforce an applicable requirement, the owner or operator of the facility must meet the notification requirements below in a timely manner and prove by a preponderance of evidence that:

- The excess emissions were caused by a sudden, unavoidable breakdown of equipment, or a sudden, (i) unavoidable failure of a process to operate in the normal or usual manner, beyond the reasonable control of the owner or operator;
- (ii) The excess emissions did not stem from any activity or event that could have reasonably been foreseen and avoided, or planned for, and could not have been avoided by better operation and maintenance practices;
- (iii) Repairs were made as expeditiously as possible when the applicable emission limitations were being exceeded:
- (iv) The amount and duration of the excess emissions (including any bypass) were minimized to the maximum extent practicable during periods of such emissions;
- All reasonably possible steps were taken to minimize the impact of the excess emissions on ambient air (v) quality;
- All emissions monitoring systems were kept in operation (if at all possible); (vi)
- (vii) The owner or operator's actions during the period of excess emissions were documented by properly signed, contemporaneous operating logs or other relevant evidence;
- (viii) The excess emissions were not part of a recurring pattern indicative of inadequate design, operation, or maintenance:
- (ix) At all times, the facility was operated in a manner consistent with good practices for minimizing emissions. This section is intended solely to be a factor in determining whether an affirmative defense is available to an owner or operator, and shall not constitute an additional applicable requirement; and
- (x) During the period of excess emissions, there were no exceedances of the relevant ambient air quality standards established in the Commissions' Regulations that could be attributed to the emitting source.

The owner or operator of the facility experiencing excess emissions during a malfunction shall notify the division verbally as soon as possible, but no later than noon of the Division's next working day, and shall submit written notification following the initial occurrence of the excess emissions by the end of the source's next reporting period. The notification shall address the criteria set forth above.

The Affirmative Defense Provision contained in this section shall not be available to claims for injunctive relief.

The Affirmative Defense Provision does not apply to failures to meet federally promulgated performance standards or emission limits, including, but not limited to, new source performance standards and national emission standards for hazardous air pollutants. The affirmative defense provision does not apply to state implementation plan (sip) limits or permit limits that have been set taking into account potential emissions during malfunctions, including, but not necessarily limited to, certain limits with 30-day or longer averaging times, limits that indicate they apply during malfunctions, and limits that indicate they apply at all times or without exception.

Operating Permit 01OPBO238 First Issued: November 1, 2003

e. Circumvention Clause

A person shall not build, erect, install, or use any article, machine, equipment, condition, or any contrivance, the use of which, without resulting in a reduction in the total release of air pollutants to the atmosphere, reduces or conceals an emission which would otherwise constitute a violation of this regulation. No person shall circumvent this regulation by using more openings than is considered normal practice by the industry or activity in question.

f. Compliance Certifications

For the purpose of submitting compliance certifications or establishing whether or not a person has violated or is in violation of any standard in the Colorado State Implementation Plan, nothing in the Colorado State Implementation Plan shall preclude the use, including the exclusive use, of any credible evidence or information, relevant to whether a source would have been in compliance with applicable requirements if the appropriate performance or compliance test or procedure had been performed. Evidence that has the effect of making any relevant standard or permit term more stringent shall not be credible for proving a violation of the standard or permit term.

When compliance or non-compliance is demonstrated by a test or procedure provided by permit or other applicable requirement, the owner or operator shall be presumed to be in compliance or non-compliance unless other relevant credible evidence overcomes that presumption.

g. Affirmative Defense Provision for Excess Emissions During Startup and Shutdown

An affirmative defense is provided to owners and operators for civil penalty actions for excess emissions during periods of startup and shutdown. To establish the affirmative defense and to be relieved of a civil penalty in any action to enforce an applicable requirement, the owner or operator of the facility must meet the notification requirements below in a timely manner and prove by a preponderance of the evidence that:

- (i) The periods of excess emissions that occurred during startup and shutdown were short and infrequent and could not have been prevented through careful planning and design;
- (ii) The excess emissions were not part of a recurring pattern indicative of inadequate design, operation or maintenance:
- (iii) If the excess emissions were caused by a bypass (an intentional diversion of control equipment), then the bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
- (iv) The frequency and duration of operation in startup and shutdown periods were minimized to the maximum extent practicable;
- (v) All possible steps were taken to minimize the impact of excess emissions on ambient air quality;
- (vi) All emissions monitoring systems were kept in operation (if at all possible);
- (vii) The owner or operator's actions during the period of excess emissions were documented by properly signed, contemporaneous operating logs or other relevant evidence; and,
- (viii) At all times, the facility was operated in a manner consistent with good practices for minimizing emissions. This subparagraph is intended solely to be a factor in determining whether an affirmative defense is available to an owner or operator, and shall not constitute an additional applicable requirement.

The owner or operator of the facility experiencing excess emissions during startup and shutdown shall notify the Division verbally as soon as possible, but no later than two (2) hours after the start of the next working day, and shall submit written quarterly notification following the initial occurrence of the excess emissions. The notification shall address the criteria set forth above.

The Affirmative Defense Provision contained in this section shall not be available to claims for injunctive relief.

Operating Permit 01OPBO238

The Affirmative Defense Provision does not apply to State Implementation Plan provisions or other requirements that derive from new source performance standards or national emissions standards for hazardous air pollutants, or any other federally enforceable performance standard or emission limit with an averaging time greater than twenty-four hours. In addition, an affirmative defense cannot be used by a single source or small group of sources where the excess emissions have the potential to cause an exceedance of the ambient air quality standards or Prevention of Significant Deterioration (PSD) increments.

In making any determination whether a source established an affirmative defense, the Division shall consider the information within the notification required above and any other information the Division deems necessary, which may include, but is not limited to, physical inspection of the facility and review of documentation pertaining to the maintenance and operation of process and air pollution control equipment.

4. Compliance Requirements

Regulation No. 3, 5 CCR 1001-5, Part C, §§ III.C.9., V.C.11. & 16.d. and § 25-7-122.1(2), C.R.S.

- a. The permittee must comply with all conditions of the Operating Permit. Any permit noncompliance relating to federally-enforceable terms or conditions constitutes a violation of the federal act, as well as the state act and Regulation No. 3. Any permit noncompliance relating to state-only terms or conditions constitutes a violation of the state act and Regulation No. 3, shall be enforceable pursuant to state law, and shall not be enforceable by citizens under § 304 of the federal act. Any such violation of the federal act, the state act or regulations implementing either statute is grounds for enforcement action, for permit termination, revocation and reissuance or modification or for denial of a permit renewal application.
- b. It shall not be a defense for a permittee in an enforcement action or a consideration in favor of a permittee in a permit termination, revocation or modification action or action denying a permit renewal application that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit.
- c. The permit may be modified, revoked, reopened, and reissued, or terminated for cause. The filing of any request by the permittee for a permit modification, revocation and reissuance, or termination, or any notification of planned changes or anticipated noncompliance does not stay any permit condition, except as provided in §§ X. and XI. of Regulation No. 3, Part C.
- d. The permittee shall furnish to the Air Pollution Control Division, within a reasonable time as specified by the Division, any information that the Division may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Division copies of records required to be kept by the permittee, including information claimed to be confidential. Any information subject to a claim of confidentiality shall be specifically identified and submitted separately from information not subject to the claim.
- e. Any schedule for compliance for applicable requirements with which the source is not in compliance at the time of permit issuance shall be supplemental, and shall not sanction noncompliance with, the applicable requirements on which it is based.
- f. For any compliance schedule for applicable requirements with which the source is not in compliance at the time of permit issuance, the permittee shall submit, at least every 6 months unless a more frequent period is specified in the applicable requirement or by the Air Pollution Control Division, progress reports which contain the following:
 - (i) dates for achieving the activities, milestones, or compliance required in the schedule for compliance, and dates when such activities, milestones, or compliance were achieved; and
 - (ii) an explanation of why any dates in the schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.

Operating Permit 01OPBO238

g. The permittee shall not knowingly falsify, tamper with, or render inaccurate any monitoring device or method required to be maintained or followed under the terms and conditions of the Operating Permit.

5. Emergency Provisions

Regulation No. 3, 5 CCR 1001-5, Part C, § VII.E

An emergency means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed the technology-based emission limitation under the permit due to unavoidable increases in emissions attributable to the emergency. "Emergency" does not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error. An emergency constitutes an affirmative defense to an enforcement action brought for noncompliance with a technology-based emission limitation if the permittee demonstrates, through properly signed, contemporaneous operating logs, or other relevant evidence that:

- a. an emergency occurred and that the permittee can identify the cause(s) of the emergency;
- b. the permitted facility was at the time being properly operated;
- c. during the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit; and
- d. the permittee submitted oral notice of the emergency to the Air Pollution Control Division no later than noon of the next working day following the emergency, and followed by written notice within one month of the time when emissions limitations were exceeded due to the emergency. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.

This emergency provision is in addition to any emergency or malfunction provision contained in any applicable requirement.

6. Emission Controls for Asbestos

Regulation No. 8, 5 CCR 1001-10, Part B

The permittee shall not conduct any asbestos abatement activities except in accordance with the provisions of Regulation No. 8. Part B, "asbestos control."

7. Emissions Trading, Marketable Permits, Economic Incentives

Regulation No. 3, 5 CCR 1001-5, Part C, § V.C.13.

No permit revision shall be required under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are specifically provided for in the permit.

8. Fee Payment

C.R.S §§ 25-7-114.1(6) and 25-7-114.7

- a. The permittee shall pay an annual emissions fee in accordance with the provisions of C.R.S. § 25-7-114.7. A 1% per month late payment fee shall be assessed against any invoice amounts not paid in full on the 91st day after the date of invoice, unless a permittee has filed a timely protest to the invoice amount.
- b. The permittee shall pay a permit processing fee in accordance with the provisions of C.R.S. § 25-7-114.7. If the Division estimates that processing of the permit will take more than 30 hours, it will notify the permittee of its estimate of what the actual charges may be prior to commencing any work exceeding the 30 hour limit.

Operating Permit 01OPBO238 First Issued: November 1, 2003 Renewed: June 1, 2013 c. The permittee shall pay an APEN fee in accordance with the provisions of C.R.S. § 25-7-114.1(6) for each APEN or revised APEN filed.

9. Fugitive Particulate Emissions

Regulation No. 1, 5 CCR 1001-3, § III.D.1.

The permittee shall employ such control measures and operating procedures as are necessary to minimize fugitive particulate emissions into the atmosphere, in accordance with the provisions of Regulation No. 1, § III.D.1.

10. Inspection and Entry

Regulation No. 3, 5 CCR 1001-5, Part C, § V.C.16.b.

Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Air Pollution Control Division, or any authorized representative, to perform the following:

- a. enter upon the permittee's premises where an Operating Permit source is located, or emissions-related activity is conducted, or where records must be kept under the terms of the permit;
- b. have access to, and copy, at reasonable times, any records that must be kept under the conditions of the permit;
- c. inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the Operating Permit;
- d. sample or monitor at reasonable times, for the purposes of assuring compliance with the Operating Permit or applicable requirements, any substances or parameters.

11. Minor Permit Modifications

Regulation No. 3, 5 CCR 1001-5, Part C, §§ X. & XI.

The permittee shall submit an application for a minor permit modification before making the change requested in the application. The permit shield shall not extend to minor permit modifications.

12. New Source Review

Regulation No. 3, 5 CCR 1001-5, Part B

The permittee shall not commence construction or modification of a source required to be reviewed under the New Source Review provisions of Regulation No. 3, Part B, without first receiving a construction permit.

13. No Property Rights Conveyed

Regulation No. 3, 5 CCR 1001-5, Part C, § V.C.11.d.

This permit does not convey any property rights of any sort, or any exclusive privilege.

14. Odor

Regulation No. 2, 5 CCR 1001-4, Part A

As a matter of state law only, the permittee shall comply with the provisions of Regulation No. 2 concerning odorous emissions.

Operating Permit 01OPBO238

First Issued: November 1, 2003

15. Off-Permit Changes to the Source

Regulation No. 3, 5 CCR 1001-5, Part C, § XII.B.

The permittee shall record any off-permit change to the source that causes the emissions of a regulated pollutant subject to an applicable requirement, but not otherwise regulated under the permit, and the emissions resulting from the change, including any other data necessary to show compliance with applicable ambient air quality standards. The permittee shall provide contemporaneous notification to the Air Pollution Control Division and to the Environmental Protection Agency at the addresses listed in Appendix D of this Permit. The permit shield shall not apply to any off-permit change.

16. Opacity

Regulation No. 1, 5 CCR 1001-3, §§ I., II.

The permittee shall comply with the opacity emissions limitation set forth in Regulation No. 1, §§ I.- II.

17. Open Burning

Regulation No. 9, 5 CCR 1001-11

The permittee shall obtain a permit from the Division for any regulated open burning activities in accordance with provisions of Regulation No. 9.

18. Ozone Depleting Compounds

Regulation No. 15, 5 CCR 1001-17

The permittee shall comply with the provisions of Regulation No. 15 concerning emissions of ozone depleting compounds. Sections I., II.C., II.D., III. IV., and V. of Regulation No. 15 shall be enforced as a matter of state law only.

19. Permit Expiration and Renewal

Regulation No. 3, 5 CCR 1001-5, Part C, §§ III.B.6., IV.C., V.C.2.

- a. The permit term shall be five (5) years. The permit shall expire at the end of its term. Permit expiration terminates the permittee's right to operate unless a timely and complete renewal application is submitted.
- b. Applications for renewal shall be submitted at least twelve months, but not more than 18 months, prior to the expiration of the Operating Permit. An application for permit renewal may address only those portions of the permit that require revision, supplementing, or deletion, incorporating the remaining permit terms by reference from the previous permit. A copy of any materials incorporated by reference must be included with the application.

20. Portable Sources

Regulation No. 3, 5 CCR 1001-5, Part C, § II.D.

Portable Source permittees shall notify the Air Pollution Control Division at least 10 days in advance of each change in location.

21. Prompt Deviation Reporting

Regulation No. 3, 5 CCR 1001-5, Part C, § V.C.7.b.

The permittee shall promptly report any deviation from permit requirements, including those attributable to malfunction conditions as defined in the permit, the probable cause of such deviations, and any corrective actions or preventive measures taken.

"Prompt" is defined as follows:

Operating Permit 01OPBO238

- a. Any definition of "prompt" or a specific timeframe for reporting deviations provided in an underlying applicable requirement as identified in this permit; or
- b. Where the underlying applicable requirement fails to address the time frame for reporting deviations, reports of deviations will be submitted based on the following schedule:
 - (i) For emissions of a hazardous air pollutant or a toxic air pollutant (as identified in the applicable regulation) that continue for more than an hour in excess of permit requirements, the report shall be made within 24 hours of the occurrence;
 - (ii) For emissions of any regulated air pollutant, excluding a hazardous air pollutant or a toxic air pollutant that continue for more than two hours in excess of permit requirements, the report shall be made within 48 hours; and
 - (iii) For all other deviations from permit requirements, the report shall be submitted every six (6) months, except as otherwise specified by the Division in the permit in accordance with paragraph 22.d. below.
- c. If any of the conditions in paragraphs b.i or b.ii above are met, the source shall notify the Division by telephone (303-692-3155) or facsimile (303-782-0278) based on the timetables listed above. [Explanatory note: Notification by telephone or facsimile must specify that this notification is a deviation report for an Operating Permit.] A written notice, certified consistent with General Condition 2.a. above (Certification Requirements), shall be submitted within 10 working days of the occurrence. All deviations reported under this section shall also be identified in the 6-month report required above.

"Prompt reporting" does not constitute an exception to the requirements of "Emergency Provisions" for the purpose of avoiding enforcement actions.

22. Record Keeping and Reporting Requirements

Regulation No. 3, 5 CCR 1001-5, Part A, § II.; Part C, §§ V.C.6., V.C.7.

- a. Unless otherwise provided in the source specific conditions of this Operating Permit, the permittee shall maintain compliance monitoring records that include the following information:
 - (i) date, place as defined in the Operating Permit, and time of sampling or measurements;
 - (ii) date(s) on which analyses were performed;
 - (iii) the company or entity that performed the analysis;
 - (iv) the analytical techniques or methods used;
 - (v) the results of such analysis; and
 - (vi) the operating conditions at the time of sampling or measurement.
- b. The permittee shall retain records of all required monitoring data and support information for a period of at least five (5) years from the date of the monitoring sample, measurement, report or application. Support information, for this purpose, includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the Operating Permit. With prior approval of the Air Pollution Control Division, the permittee may maintain any of the above records in a computerized form.
- c. Permittees must retain records of all required monitoring data and support information for the most recent twelve (12) month period, as well as compliance certifications for the past five (5) years on-site at all times. A permittee shall make available for the Air Pollution Control Division's review all other records of required monitoring data and support information required to be retained by the permittee upon 48 hours advance notice by the Division.

Operating Permit 01OPBO238 First Issued: November 1, 2003

- d. The permittee shall submit to the Air Pollution Control Division all reports of any required monitoring at least every six (6) months, unless an applicable requirement, the compliance assurance monitoring rule, or the Division requires submission on a more frequent basis. All instances of deviations from any permit requirements must be clearly identified in such reports.
- e. The permittee shall file an Air Pollutant Emissions Notice ("APEN") prior to constructing, modifying, or altering any facility, process, activity which constitutes a stationary source from which air pollutants are or are to be emitted, unless such source is exempt from the APEN filing requirements of Regulation No. 3, Part A, § II.D. A revised APEN shall be filed annually whenever a significant change in emissions, as defined in Regulation No. 3, Part A, § II.C.2., occurs; whenever there is a change in owner or operator of any facility, process, or activity; whenever new control equipment is installed; whenever a different type of control equipment replaces an existing type of control equipment; whenever a permit limitation must be modified; or before the APEN expires. An APEN is valid for a period of five years. The five-year period recommences when a revised APEN is received by the Air Pollution Control Division. Revised APENs shall be submitted no later than 30 days before the five-year term expires. Permittees submitting revised APENs to inform the Division of a change in actual emission rates must do so by April 30 of the following year. Where a permit revision is required, the revised APEN must be filed along with a request for permit revision. APENs for changes in control equipment must be submitted before the change occurs. Annual fees are based on the most recent APEN on file with the Division.

23. Reopenings for Cause

Regulation No. 3, 5 CCR 1001-5, Part C, § XIII.

- a. The Air Pollution Control Division shall reopen, revise, and reissue Operating Permits; permit reopenings and reissuance shall be processed using the procedures set forth in Regulation No. 3, Part C, § III., except that proceedings to reopen and reissue permits affect only those parts of the permit for which cause to reopen exists.
- b. The Division shall reopen a permit whenever additional applicable requirements become applicable to a major source with a remaining permit term of three or more years, unless the effective date of the requirements is later than the date on which the permit expires, or unless a general permit is obtained to address the new requirements; whenever additional requirements (including excess emissions requirements) become applicable to an affected source under the acid rain program; whenever the Division determines the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit; or whenever the Division determines that the permit must be revised or revoked to assure compliance with an applicable requirement.
- c. The Division shall provide 30 days' advance notice to the permittee of its intent to reopen the permit, except that a shorter notice may be provided in the case of an emergency.
- d. The permit shield shall extend to those parts of the permit that have been changed pursuant to the reopening and reissuance procedure.

24. Section 502(b)(10) Changes

Regulation No. 3, 5 CCR 1001-5, Part C, § XII.A.

The permittee shall provide a minimum 7-day advance notification to the Air Pollution Control Division and to the Environmental Protection Agency at the addresses listed in Appendix D of this Permit. The permittee shall attach a copy of each such notice given to its Operating Permit.

Operating Permit 01OPBO238 First Issued: November 1, 2003

25. Severability Clause

Regulation No. 3, 5 CCR 1001-5, Part C, § V.C.10.

In the event of a challenge to any portion of the permit, all emissions limits, specific and general conditions, monitoring, record keeping and reporting requirements of the permit, except those being challenged, remain valid and enforceable.

26. Significant Permit Modifications

Regulation No. 3, 5 CCR 1001-5, Part C, § III.B.2.

The permittee shall not make a significant modification required to be reviewed under Regulation No. 3, Part B ("Construction Permit" requirements) without first receiving a construction permit. The permittee shall submit a complete Operating Permit application or application for an Operating Permit revision for any new or modified source within twelve months of commencing operation, to the address listed in Item 1 in Appendix D of this permit. If the permittee chooses to use the "Combined Construction/Operating Permit" application procedures of Regulation No. 3, Part C, then the Operating Permit must be received prior to commencing construction of the new or modified source.

27. Special Provisions Concerning the Acid Rain Program

Regulation No. 3, 5 CCR 1001-5, Part C, §§ V.C.1.b. & 8

- a. Where an applicable requirement of the federal act is more stringent than an applicable requirement of regulations promulgated under Title IV of the federal act, 40 Code of Federal Regulations (CFR) Part 72, both provisions shall be incorporated into the permit and shall be federally enforceable.
- b. Emissions exceeding any allowances that the source lawfully holds under Title IV of the federal act or the regulations promulgated thereunder, 40 CFR Part 72, are expressly prohibited.

28. Transfer or Assignment of Ownership

Regulation No. 3, 5 CCR 1001-5, Part C, § II.C.

No transfer or assignment of ownership of the Operating Permit source will be effective unless the prospective owner or operator applies to the Air Pollution Control Division on Division-supplied Administrative Permit Amendment forms, for reissuance of the existing Operating Permit. No administrative permit shall be complete until a written agreement containing a specific date for transfer of permit, responsibility, coverage, and liability between the permittee and the prospective owner or operator has been submitted to the Division.

29. Volatile Organic Compounds

Regulation No. 7, 5 CCR 1001-9, §§ III & V.

The requirements in paragraphs a, b and e apply to sources located in an ozone non-attainment area or the Denver 1-hour ozone attainment/maintenance area. The requirements in paragraphs c and d apply statewide.

- a. All storage tank gauging devices, anti-rotation devices, accesses, seals, hatches, roof drainage systems, support structures, and pressure relief valves shall be maintained and operated to prevent detectable vapor loss except when opened, actuated, or used for necessary and proper activities (e.g. maintenance). Such opening, actuation, or use shall be limited so as to minimize vapor loss.
 - Detectable vapor loss shall be determined visually, by touch, by presence of odor, or using a portable hydrocarbon analyzer. When an analyzer is used, detectable vapor loss means a VOC concentration exceeding 10,000 ppm. Testing shall be conducted as in Regulation No. 7, Section VIII.C.3.
- b. Except when otherwise provided by Regulation No. 7, all volatile organic compounds, excluding petroleum liquids, transferred to any tank, container, or vehicle compartment with a capacity exceeding 212 liters (56 gallons), shall be

Operating Permit 01OPBO238

transferred using submerged or bottom filling equipment. For top loading, the fill tube shall reach within six inches of the bottom of the tank compartment. For bottom-fill operations, the inlet shall be flush with the tank bottom.

- c. The permittee shall not dispose of volatile organic compounds by evaporation or spillage unless Reasonably Available Control Technology (RACT) is utilized.
- d. No owner or operator of a bulk gasoline terminal, bulk gasoline plant, or gasoline dispensing facility as defined in Colorado Regulation No. 7, Section VI, shall permit gasoline to be intentionally spilled, discarded in sewers, stored in open containers, or disposed of in any other manner that would result in evaporation.
- e. Beer production and associated beer container storage and transfer operations involving volatile organic compounds with a true vapor pressure of less than 1.5 PSIA actual conditions are exempt from the provisions of paragraph b, above.

30. Wood Stoves and Wood burning Appliances

Regulation No. 4, 5 CCR 1001-6

The permittee shall comply with the provisions of Regulation No. 4 concerning the advertisement, sale, installation, and use of wood stoves and wood burning appliances.

Operating Permit 01OPBO238 First Issued: November 1, 2003

OPERATING PERMIT APPENDICES

- A INSPECTION INFORMATION
- **B-MONITORING AND PERMIT DEVIATION REPORT**
- C COMPLIANCE CERTIFICATION REPORT
- **D-NOTIFICATION ADDRESSES**
- **E-PERMIT ACRONYMS**
- F PERMIT MODIFICATIONS

*DISCLAIMER:

None of the information found in these Appendices shall be considered to be State or Federally enforceable, except as otherwise provided in the permit, and is presented to assist the source, permitting authority, inspectors, and citizens.

APPENDIX A - Inspection Information

1. Directions to Plant:

The facility is located adjacent to the Public Service of Colorado Valmont Generating Station at 1800 North 63rd Street in Boulder.

2. Safety Equipment Required:

Eye Protection, Hard Hat, Safety Shoes and Hearing Protection

3. Facility Plot Plan:

The attached Figure (following page) shows the plot plan as submitted in October 2012.

4. List of Insignificant Activities:

The following list of insignificant activities was provided by the source to assist in the understanding of the facility layout. Since there is no requirement to update such a list, activities may have changed since the last filing.

Oil/Water Separator

Raw and Treated Water storage

Lube Oil storage

Small quantity fuel storage (for miscellaneous equipment)

Used Oil storage

Station Transformers and associated oils

Maintenance Activities

Welding operations

Warehouse storage

Landscaping maintenance equipment and activities

Use of pesticides, fumigants and herbicides

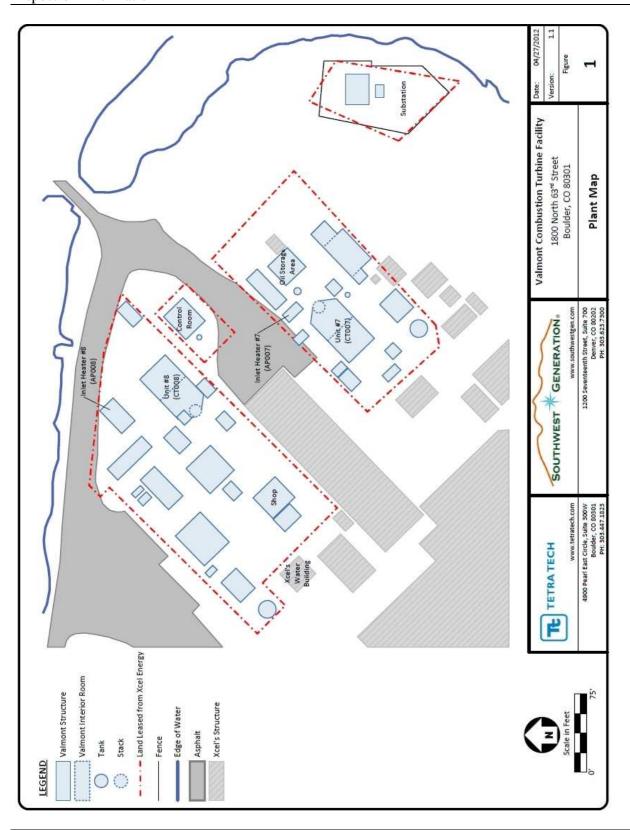
Laboratory activities

Housekeeping activities

General Office activities

Steam vents

Operating Permit 01OPBO238 First Issued: November 1, 2003



APPENDIX B

Reporting Requirements and Definitions

with codes ver 2/20/07

Please note that, pursuant to 113(c)(2) of the federal Clean Air Act, any person who knowingly:

- (A) makes any false material statement, representation, or certification in, or omits material information from, or knowingly alters, conceals, or fails to file or maintain any notice, application, record, report, plan, or other document required pursuant to the Act to be either filed or maintained (whether with respect to the requirements imposed by the Administrator or by a State);
- (B) fails to notify or report as required under the Act; or
- (C) falsifies, tampers with, renders inaccurate, or fails to install any monitoring device or method required to be maintained or followed under the Act shall, upon conviction, be punished by a fine pursuant to title 18 of the United States Code, or by imprisonment for not more than 2 years, or both. If a conviction of any person under this paragraph is for a violation committed after a first conviction of such person under this paragraph, the maximum punishment shall be doubled with respect to both the fine and imprisonment.

The permittee must comply with all conditions of this operating permit. Any permit noncompliance constitutes a violation of the Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

The Part 70 Operating Permit program requires three types of reports to be filed for all permits. All required reports must be certified by a responsible official.

Report #1: Monitoring Deviation Report (due at least every six months)

For purposes of this operating permit, the Division is requiring that the monitoring reports are due every six months unless otherwise noted in the permit. All instances of deviations from permit monitoring requirements must be clearly identified in such reports.

For purposes of this operating permit, monitoring means any condition determined by observation, by data from any monitoring protocol, or by any other monitoring which is required by the permit as well as the recordkeeping associated with that monitoring. This would include, for example, fuel use or process rate monitoring, fuel analyses, and operational or control device parameter monitoring.

Report #2: Permit Deviation Report (must be reported "promptly")

In addition to the monitoring requirements set forth in the permits as discussed above, each and every requirement of the permit is subject to deviation reporting. The reports must address deviations from permit requirements, including those attributable to malfunctions as defined in this Appendix, the probable cause of

Operating Permit 01OPBO238 First Issued: November 1, 2003

such deviations, and any corrective actions or preventive measures taken. All deviations from any term or condition of the permit are required to be summarized or referenced in the annual compliance certification.

For purposes of this operating permit, "malfunction" shall refer to both emergency conditions and malfunctions. Additional discussion on these conditions is provided later in this Appendix.

For purposes of this operating permit, the Division is requiring that the permit deviation reports are due as set forth in General Condition 21. Where the underlying applicable requirement contains a definition of prompt or otherwise specifies a time frame for reporting deviations, that definition or time frame shall govern. For example, quarterly Excess Emission Reports required by an NSPS or Regulation No. 1, Section IV.

In addition to the monitoring deviations discussed above, included in the meaning of deviation for the purposes of this operating permit are any of the following:

- (1) A situation where emissions exceed an emission limitation or standard contained in the permit;
- (2) A situation where process or control device parameter values demonstrate that an emission limitation or standard contained in the permit has not been met;
- (3) A situation in which observations or data collected demonstrates noncompliance with an emission limitation or standard or any work practice or operating condition required by the permit; or,
- (4) A situation in which an excursion or exceedance as defined in 40CFR Part 64 (the Compliance Assurance Monitoring (CAM) Rule) has occurred. (only if the emission point is subject to CAM)

For reporting purposes, the Division has combined the Monitoring Deviation Report with the Permit Deviation Report. All deviations shall be reported using the following codes:

1 = Standard: When the requirement is an emission limit or standard 2 = Process: When the requirement is a production/process limit

3 = Monitor: When the requirement is monitoring 4 = Test: When the requirement is testing

5 = Maintenance: When required maintenance is not performed
 6 = Record: When the requirement is recordkeeping
 7 = Report: When the requirement is reporting

8 = CAM: A situation in which an excursion or exceedance as defined in 40CFR Part 64 (the

Compliance Assurance Monitoring (CAM) Rule) has occurred.

9 = Other: When the deviation is not covered by any of the above categories

Report #3: Compliance Certification (annually, as defined in the permit)

Submission of compliance certifications with terms and conditions in the permit, including emission limitations, standards, or work practices, is required not less than annually.

Compliance Certifications are intended to state the compliance status of each requirement of the permit over the certification period. They must be based, at a minimum, on the testing and monitoring methods specified in the

Operating Permit 01OPBO238 First Issued: November 1, 2003

permit that were conducted during the relevant time period. In addition, if the owner or operator knows of other material information (i.e. information beyond required monitoring that has been specifically assessed in relation to how the information potentially affects compliance status), that information must be identified and addressed in the compliance certification. The compliance certification must include the following:

- The identification of each term or condition of the permit that is the basis of the certification;
- Whether or not the method(s) used by the owner or operator for determining the compliance status with each permit term and condition during the certification period was the method(s) specified in the permit. Such methods and other means shall include, at a minimum, the methods and means required in the permit. If necessary, the owner or operator also shall identify any other material information that must be included in the certification to comply with section 113(c)(2) of the Federal Clean Air Act, which prohibits knowingly making a false certification or omitting material information;
- The status of compliance with the terms and conditions of the permit, and whether compliance was continuous or intermittent. The certification shall identify each deviation and take it into account in the compliance certification. Note that not all deviations are considered violations.
- Such other facts as the Division may require, consistent with the applicable requirements to which the source is subject, to determine the compliance status of the source.

The Certification shall also identify as possible exceptions to compliance any periods during which compliance is required and in which an excursion or exceedance as defined under 40 CFR Part 64 (the Compliance Assurance Monitoring (CAM) Rule) has occurred. (only for emission points subject to CAM)

Note the requirement that the certification shall identify each deviation and take it into account in the compliance certification. Previously submitted deviation reports, including the deviation report submitted at the time of the annual certification, may be referenced in the compliance certification.

Operating Permit 01OPBO238

First Issued: November 1, 2003

¹ For example, given the various emissions limitations and monitoring requirements to which a source may be subject, a deviation from one requirement may not be a deviation under another requirement which recognizes an exception and/or special circumstances relating to that same event.

Startup, Shutdown, Malfunctions and Emergencies

Understanding the application of Startup, Shutdown, Malfunctions and Emergency Provisions, is very important in both the deviation reports and the annual compliance certifications.

Startup, Shutdown, and Malfunctions

Please note that exceedances of some New Source Performance Standards (NSPS) and Maximum Achievable Control Technology (MACT) standards that occur during Startup, Shutdown or Malfunctions may not be considered to be non-compliance since emission limits or standards often do not apply unless specifically stated in the NSPS. Such exceedances must, however, be reported as excess emissions per the NSPS/MACT rules and would still be noted in the deviation report. In regard to compliance certifications, the permittee should be confident of the information related to those deviations when making compliance determinations since they are subject to Division review. The concepts of Startup, Shutdown and Malfunctions also exist for Best Available Control Technology (BACT) sources, but are not applied in the same fashion as for NSPS and MACT sources.

Emergency Provisions

Under the Emergency provisions of Part 70 certain operational conditions may act as an affirmative defense against enforcement action if they are properly reported.

DEFINITIONS

Malfunction (NSPS) means any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner. Failures that are caused in part by poor maintenance or careless operation are not malfunctions.

Malfunction (SIP) means any sudden and unavoidable failure of air pollution control equipment or process equipment or unintended failure of a process to operate in a normal or usual manner. Failures that are primarily caused by poor maintenance, careless operation, or any other preventable upset condition or preventable equipment breakdown shall not be considered malfunctions.

Emergency means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.

Operating Permit 01OPBO238 First Issued: November 1, 2003

Monitoring and Permit Deviation Report - Part I

- Following is the **required** format for the Monitoring and Permit Deviation report to be submitted to the 1. Division as set forth in General Condition 21. The Table below must be completed for all equipment or processes for which specific Operating Permit terms exist.
- 2. Part II of this Appendix B shows the format and information the Division will require for describing periods of monitoring and permit deviations, or malfunction or emergency conditions as indicated in the Table below. One Part II Form must be completed for each Deviation. Previously submitted reports (e.g. EER's or malfunctions) may be referenced and the form need not be filled out in its entirety.

FACILITY NAME: SWG Colorado, LLC -	- Valmont Combustion Turbine Facility
OPERATING PERMIT NO: 01OPBO238	
REPORTING PERIOD:	(see first page of the permit for specific reporting period and dates)

Operating Permit Unit		Deviation During P		Deviation Code ²	Condition	/Emergency n Reported Period?
ID	Unit Description	YES	NO		YES	NO
CT007, CT008, AP007 & AP008	Two (2) General Electric (GE) Model LM6000, Natural Gas Fired Combustion Turbine Generators, rated at 347 MMBtu/hr (CT007, serial number 191-232) and 343 MMBtu/hr (CT008, serial number 191-230). Two Natural Gas Fired Inlet Air Heaters, rated at 5 MMBtu/hr (AP007) and 6.5 MMBtu/hr (AP008). Requirements Applicable Prior To October 1, 2012					
CT007, CT008, AP007 & AP008	Two (2) General Electric (GE) Model LM6000, Natural Gas Fired Combustion Turbine Generators, rated at 347 MMBtu/hr (CT007, serial number 191-232) and 343 MMBtu/hr (CT008, serial number 191-230). Two Natural Gas Fired Inlet Air Heaters, rated at 5 MMBtu/hr (AP007) and 6.5 MMBtu/hr (AP008). Requirements Applicable Beginning October 1, 2012					
General Conditions						
Insignificant Activities		-				

¹ See previous discussion regarding what is considered to be a deviation. Determination of whether or not a deviation has occurred shall be based on a reasonable inquiry using readily available information.

Operating Permit 01OPBO238 First Issued: November 1, 2003

² Use the following entries, as appropriate

1 = Standard: When the requirement is an emission limit or standard 2 = Process: When the requirement is a production/process limit

3 = Monitor: When the requirement is monitoring When the requirement is testing

5 = Maintenance: When required maintenance is not performed
 6 = Record: When the requirement is recordkeeping
 7 = Report: When the requirement is reporting

8 = CAM: A situation in which an excursion or exceedance as defined in 40CFR Part 64 (the

Compliance Assurance Monitoring (CAM) Rule) has occurred.

9 = Other: When the deviation is not covered by any of the above categories

Operating Permit 01OPBO238

First Issued: November 1, 2003

Monitoring and Permit Deviation Report - Part II

FACILITY NAME: SWG Colorado, LLC - OPERATING PERMIT NO: 01OPBO238 REPORTING PERIOD:	– Valmont Combust	ion Turbine Facilit	y
Is the deviation being claimed as an:	Emergency	_ Malfunction_	N/A
(For NSPS/MACT) Did the deviation occur during:	Startup	Shutdown	Malfunction
	Normal Operation		
OPERATING PERMIT UNIT IDENTIFICATION:			
Operating Permit Condition Number Citation			
Explanation of Period of Deviation			
<u>Duration (start/stop date & time)</u>			
Action Taken to Correct the Problem			
Measures Taken to Prevent a Reoccurrence of the Pr	<u>roblem</u>		
Dates of Malfunctions/Emergencies Reported (if app	<u>plicable)</u>		
Deviation Code	Division Code QA:		
SEE EXAMPLI	E ON THE NEXT	PAGE	

Acme Corp.

FACILITY NAME:

EXAMPLE

OPERATING PERMIT NO: 96OPZZXXX REPORTING PERIOD: 1/1/04 - 6/30/06				
Is the deviation being claimed as an:	Emergency	Malfunction _	XX	N/A
(For NSPS/MACT) Did the deviation occur during:	Startup Normal Operation	Shutdown		etion
OPERATING PERMIT UNIT IDENTIFICATION:				
Asphalt Plant with a Scrubber for Particulate Contro	l - Unit XXX			
Operating Permit Condition Number Citation				
Section II, Condition 3.1 - Opacity Limitation				
Explanation of Period of Deviation				
Slurry Line Feed Plugged				
<u>Duration</u>				
START- 1730 4/10/06 END- 1800 4/10/06				
Action Taken to Correct the Problem				
Line Blown Out				
Measures Taken to Prevent Reoccurrence of the Pro	<u>blem</u>			
Replaced Line Filter				
Dates of Malfunction/Emergencies Reported (if app	<u>licable)</u>			
5/30/06 to J. Hawkins, APCD				
Deviation Code	Division Code QA:			

Renewed: June 1, 2013

Monitoring and Permit Deviation Report - Part III

REPORT CERTIFICATION

SOURCE NAME: SWG Colorado,	LLC – Valmont Combustion	1 Turbine Facility
FACILITY IDENTIFICATION NUM	MBER: 0131460	
PERMIT NUMBER: 01OPBO238		
REPORTING PERIOD:	(see first page of the	e permit for specific reporting period and dates)
	3, Part A, Section I.B.38. T	must be certified by a responsible official as his signed certification document must be
STATEMENT OF COMPLETEN	ESS	
	0	ty and, based on information and belief s and information contained in this submittal
1-501(6), C.R.S., makes any false n	naterial statement, represe	who knowingly, as defined in Sub-Section 18- entation, or certification in this document is with the provisions of Sub-Section 25-7
Printed or Typed Nan	ne	Title
Signature of Responsi	ible Official	Date Signed
Note: Deviation reports shall be su permit. No copies need be sent to t		the address given in Appendix D of this
Operating Permit 01OPBO238		First Issued: November 1, 2003

APPENDIX C

Required Format for Annual Compliance Certification Reports

Following is the format for the Compliance Certification report to be submitted to the Division and the U.S. EPA annually based on the effective date of the permit. The Table below must be completed for all equipment or processes for which specific Operating Permit terms exist.

FACILITY NAME:	SWG Colorado, LLC - Valmont Combustion Turbine Facility
OPERATING PERMIT NO:	01OPBO238
REPORTING PERIOD:	

I. Facility Status

During the entire reporting period, this source was in compliance with ALL terms and conditions cont	tained
in the Permit, each term and condition of which is identified and included by this reference. The method(s	3)
used to determine compliance is/are the method(s) specified in the Permit.	

With the possible exception of the deviations identified in the table below, this source was in compliance with all terms and conditions contained in the Permit, each term and condition of which is identified and included by this reference, during the entire reporting period. The method used to determine compliance for each term and condition is the method specified in the Permit, unless otherwise indicated and described in the deviation report(s). Note that not all deviations are considered violations.

Operating Permit Unit ID	Unit Description	Deviations Reported ¹		Monitor Method Permit?	per	Was compliance intermittent? ³	continuous or
ID.		Previous	Current	YES	NO	Continuous	Intermittent
CT007, CT008, AP007 & AP008	Two (2) General Electric (GE) Model LM6000, Natural Gas Fired Combustion Turbine Generators, rated at 347 MMBtu/hr (CT007, serial number 191-232) and 343 MMBtu/hr (CT008, serial number 191-230). Two Natural Gas Fired Inlet Air Heaters, rated at 5 MMBtu/hr (AP007) and 6.5 MMBtu/hr (AP008). Requirements Applicable Prior To October 1, 2012						

Operating Permit 01OPBO238 First Issued: November 1, 2003

Operating Permit Unit ID	Unit Description	Deviations Reported ¹		Monitor Method Permit?	per	Was compliance intermittent? ³	continuous or
		Previous	Current	YES	NO	Continuous	Intermittent
CT007, CT008, AP007 & AP008	Two (2) General Electric (GE) Model LM6000, Natural Gas Fired Combustion Turbine Generators, rated at 347 MMBtu/hr (CT007, serial number 191-232) and 343 MMBtu/hr (CT008, serial number 191-230). Two Natural Gas Fired Inlet Air Heaters, rated at 5 MMBtu/hr (AP007) and 6.5 MMBtu/hr (AP008). Requirements Applicable Beginning October 1, 2012						
General Condi	tions						
Insignificant A	ctivities ⁴						

¹ If deviations were noted in a previous deviation report, put an "X" under "previous". If deviations were noted in the current deviation report (i.e. for the last six months of the annual reporting period), put an "X" under "current". Mark both columns if both apply.

NOTE:

The Periodic Monitoring requirements of the Operating Permit program rule are intended to provide assurance that even in the absence of a continuous system of monitoring the Title V source can demonstrate whether it has operated in continuous compliance for the duration of the reporting period. Therefore, if a source 1) conducts all of the monitoring and recordkeeping required in its permit, even if such activities are done periodically and not continuously, and if 2) such monitoring and recordkeeping does not indicate non-compliance, and if 3) the Responsible Official is not aware of any credible evidence that indicates non-compliance, then the Responsible Official can certify that the emission point(s) in question were in continuous compliance during the applicable time period.

² Note whether the method(s) used to determine the compliance status with each term and condition was the method(s) specified in the permit. If it was not, mark "no" and attach additional information/explanation.

³ Note whether the compliance status with each term and condition provided was continuous or intermittent. "Intermittent Compliance" can mean either that noncompliance has occurred or that the owner or operator has data sufficient to certify compliance only on an intermittent basis. Certification of intermittent compliance therefore does not necessarily mean that any noncompliance has occurred.

⁴ Compliance status for these sources shall be based on a reasonable inquiry using readily available information.

	Statu	s for Accidental Release Prevention Program:	
	A.	This facility is subject is not s Release Prevention Program (Section 112(r) of the	
	B.	If subject: The facility is is requirements of section 112(r).	is not in compliance with all the
		A Risk Management Plan will appropriate authority and/or the designated.	
III.	Certi	fication	
Color	ado Re	on for the Annual Compliance Certification must be gulation No. 3, Part A, Section I.B.38. This signed its being submitted.	• •
accur	ate and	nquiry, I certify that the statements and informad complete.	
C.R.S	S., mak	es any false material statement, representation, or and may be punished in accordance with the p	
C.R.S	S., mak	es any false material statement, representation, o	r certification in this document is guilty of a
C.R.S	S., mak	es any false material statement, representation, or and may be punished in accordance with the p Printed or Typed Name	r certification in this document is guilty of a rovisions of § 25-7 122.1, C.R.S. Title
C.R.S misde	S., mak emeand	es any false material statement, representation, or and may be punished in accordance with the p	r certification in this document is guilty of a rovisions of § 25-7 122.1, C.R.S. Title Date Signed
C.R.S misde	S., mak emeand	es any false material statement, representation, or and may be punished in accordance with the punished or Typed Name Signature Inpliance certifications shall be submitted to the Air Pollution of the punished in accordance with the punished wit	r certification in this document is guilty of a rovisions of § 25-7 122.1, C.R.S. Title Date Signed
C.R.S misde	S., mak emeand	es any false material statement, representation, or and may be punished in accordance with the punished or Typed Name Signature Inpliance certifications shall be submitted to the Air Pollution of the punished in accordance with the punished wit	r certification in this document is guilty of a rovisions of § 25-7 122.1, C.R.S. Title Date Signed

APPENDIX D

Notification Addresses

1. Air Pollution Control Division

Colorado Department of Public Health and Environment Air Pollution Control Division Operating Permits Unit APCD-SS-B1 4300 Cherry Creek Drive S. Denver, CO 80246-1530

ATTN: Matt Burgett

2. United States Environmental Protection Agency

Compliance Notifications:

Office of Enforcement, Compliance and Environmental Justice Mail Code 8ENF-T U.S. Environmental Protection Agency, Region VIII 1595 Wynkoop Street Denver, Colorado 80202-1129

Permit Modifications, Off Permit Changes:

Office of Partnerships and Regulatory Assistance Air and Radiation Programs, 8P-AR U.S. Environmental Protection Agency, Region VIII 1595 Wynkoop Street Denver, Colorado 80202-1129

First Issued: November 1, 2003 Renewed: June 1, 2013

APPENDIX E

Permit Acronyms

Listed Alphabetically:

AIRS -	Aerome	etric	Inforn	natio	n Retr	ieval	System
			_			_	

AOS - Alternative Operating Scenario

AP-42 - EPA Document Compiling Air Pollutant Emission Factors

APEN - Air Pollution Emission Notice (State of Colorado) APCD - Air Pollution Control Division (State of Colorado)

ASTM - American Society for Testing and Materials

BACT - Best Available Control Technology

BTU - British Thermal Unit

CAA - Clean Air Act (CAAA = Clean Air Act Amendments)

CAM - Compliance Assurance Monitoring
CCR - Colorado Code of Regulations
CEM - Continuous Emissions Monitor

CF - Cubic Feet (SCF = Standard Cubic Feet)

CFR - Code of Federal Regulations CMS - Continuous Monitoring System

CO - Carbon Monoxide

CO_{2e} - Carbon Dioxide Equivalent COM - Continuous Opacity Monitor CRS - Colorado Revised Statute

DAHS - Data Acquisition and Handling System

EF - Emission Factor

EPA - Environmental Protection Agency FI - Fuel Input Rate in MMBtu/hr

FR - Federal Register

G - Grams Gal - Gallon

GPM - Gallons per Minute
GWP - Global Warming Potential
HAPs - Hazardous Air Pollutants
HHV - Higher Heating Value

HP - Horsepower

HP-HR - Horsepower Hour (G/HP-HR = Grams per Horsepower Hour)

Hr - Hour

LAER - Lowest Achievable Emission Rate

LBS - Pounds

LHV - Lower Heating Value

M - Thousand Min - Minute MM - Million MMBtu Million Btu

MMscf - Million Standard Cubic Feet

MMscfd - Million Standard Cubic Feet per Day

MW - Megawatt N/A or NA - Not Applicable

NANSR - Non-Attainment New Source Review

NOx - Nitrogen Oxides

NESHAP - National Emission Standards for Hazardous Air Pollutants

NSPS - New Source Performance Standards

NSR - New Source Review

 O_2 - Oxygen

P - Process Weight Rate in Tons/Hr

PE - Particulate Emissions PM - Particulate Matter

 PM_{10} - Particulate Matter Under 10 Microns $PM_{2.5}$ - Particulate Matter Under 2.5 Microns

PPM - Parts per million

PPMvd - Parts per million, dry volume basis PSD - Prevention of Significant Deterioration

PTE - Potential To Emit

RACT - Reasonably Available Control Technology

SCC - Source Classification Code

SCF - Standard Cubic Feet

SIC - Standard Industrial Classification

SO₂ - Sulfur Dioxide

TDS - Total Dissolved Solids

TPY - Tons Per Year

TSP - Total Suspended Particulate VOC - Volatile Organic Compounds

APPENDIX F

Permit Modifications

DARE OF	TEVEN OF	and the second s	DEGCD IDEION OF PENNSYON
DATE OF REVISION	TYPE OF REVISION	SECTION NUMBER, CONDITION NUMBER	DESCRIPTION OF REVISION
REVISION	REVISION	CONDITION NOMBER	